RAILROAD

APRIL, 1964

MAGAZINE | 50c

FEB 11 1964

ONE NIGHT ON A SOUTHBOUND LIMITED

by FRANK P. DONOVAN, Jr.

new, low-cost SERVICE LIFE INSURANCE hospital plan protects YOU and YOUR FAMILY against staggering medical and prolonged hospital expenses

PAYS YOU $100.00 A WEEK FOR 52 WEEKS

SERVING THE 50 STATES
THE SERVICE LIFE INSURANCE CO.,
OMAHA, NEBRASKA

YOUR POLICY PAYS $100.00 A WEEK (WHICH IS $14.28 PER DAY) FOR 52 WEEKS ($5200) FOR ANY ONE CONFINEMENT. HALF BENEFITS ARE PAID FOR CHILDREN UNDER EIGHTEEN ($2600) AT REDUCED RATES. ALL BENEFITS ARE PAID DIRECTLY TO YOU IN ADDITION TO ANY OTHER INSURANCE YOU CARRY!

SPECIAL GET-ACQUAINTED ENROLLMENT OFFER!

MONEY BACK GUARANTEE

If you don't agree that this policy is the finest there is, just return it within 10 days and receive your dollar back. What could be fairer . . . more honest? You examine this policy carefully. No salesmen will call. We want you to be completely satisfied. There is absolutely no risk.

YES, one dollar is all you pay for two full months of hospital protection for you and your entire family if you use the easy-to-fill-out application below.

AFTER THE SECOND MONTH, you pay the low premiums listed below which are 25% to 45% less than you would pay for the same coverage elsewhere.

BASIC COVERAGE RATES

EACH PERSON	Monthly	3 Mos.	6 Mos.	12 Mos.
Age 18 to 39	$1.50	$ 4.35	$ 8.55	$16.45
40 to 49	2.00	5.80	11.40	21.90
50 to 54	2.50	7.25	14.25	27.40
55 to 59	3.00	8.70	17.10	32.85
60 to 64	3.50	10.15	19.95	38.35
65 to 69	4.00	11.60	22.80	43.80
70 to 75	7.10	20.60	40.45	77.50
For Each Child Under Age 18	.75	2.20	4.30	8.25

Don't let prolonged hospital expenses rob you of your life's savings. Hospitalization expenses now are at an all time high. Since sickness or accidents come when least expected, you owe it to yourself and your family to be protected with Service Life's new, low-cost hospital plan! This sensible plan protects your savings, gives you peace of mind, the extra money you need *just when you need it the most.*

This policy helps you afford the best care . . . the kind that assures a fast return to good health. You may choose your own Doctor of Medicine and enter any hospital equipped for major surgery and providing 24 hour nursing service.

Hospital benefits are paid for accidents starting the day your policy is issued. Covered sicknesses are those originating 30 days after policy date; TB, cancer, heart disease, female conditions, back impairments and sickness requiring surgery are covered when originating six months after the policy date.

The policy provides a full 31 day grace period. You may renew this policy to age 75 with the consent of the company. THESE ARE THE ONLY EXCLUSIONS: The policy does not cover suicide, venereal disease, intoxication, criminal acts, military risks, mental disorders, dental treatment (unless for fractured jaw), maternity (except by Maternity Rider at small extra cost) and rest cures.

WHY THIS SPECIAL OFFER IS MADE

Because we employ no salesmen and pay no commissions, we use this means to acquaint you with the tremendous premium savings you get with this policy. It costs a great deal more than $1.00 to issue this SPECIAL GET-ACQUAINTED POLICY, but we're willing to risk this initial expense to put the policy in your hands so you can see for yourself how good it is and that you will want to keep it in force.

WHY THESE PREMIUMS ARE SO LOW

Because you deal direct with us we eliminate high selling costs. We employ no salesmen and pay no commissions. Costs are reduced to a minimum and savings of 25% to 45% are passed on to you in the form of lower premiums.

WHY CLAIMS ARE PAID FAST

Because you deal direct, your claims are processed fast. There are no adjusters or district offices for claims to pass through, which could result in loss of time . . . *just when you need extra money the most, and fast.* To file a claim, just notify us in writing and claim blanks are sent by return mail, with easy-to-fill instructions. Thus you can get fast action no matter where you live!

SPECIAL COVERAGES MAY BE ADDED

Your basic policy pays for hospital room, board and general care for covered sickness or accident. At small extra cost, you can add surgical or medical benefits, or maternity benefits to cover pregnancy or its complications, at home, in the doctor's office or in the hospital. Loss of Wages Benefits up to $300 per month are also available at low cost. For information on each, check application blank below when sending your $1.00 for our Special Offer.

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FILL IN AND MAIL TODAY! *Takes only a minute to complete for family protection! Do it now!*

THE SERVICE LIFE INSURANCE COMPANY OF OMAHA • Dept. E-367 1904 Farnam St., Omaha 2, Nebraska

Gentlemen — I am enclosing $1.00 in payment for two (2) months' insurance and I hereby apply to The Service Life Insurance Company of Omaha, for a Family Hospitalization policy for myself and for my dependents, if any, whose names appear below:

Full Name of Applicant _____ Sex ____

Address _____ Date of Birth _____

City _____ Zone _____ State _____

Occupation _____ Height _____ Weight _____

ONE POLICY MAY INCLUDE AS MANY AS ARE IN THE FAMILY (Applications for 1 person may be issued to adults only). (Please print full names of members whom you wish included in this policy)

FIRST NAME • MIDDLE NAME • LAST NAME	DATE OF BIRTH MO. DAY YR.	HEIGHT	WEIGHT	SEX
1.				
2.				
3.				
4.				
5.				

1. Are you and all persons named herein now in good health and free from any physical defects or deformities to the best of your knowledge? _____
2. Have you or any other person named herein during the last five years had any medical or surgical advice or treatment or any other departure from good health? Yes _____ No _____ If the answer is yes, please give details

_____

I have read the foregoing questions and I represent and affirm each answer to be true. I agree to accept the policy that may be issued upon this application. I also agree that the company shall not be liable for payment of any benefits upon sickness, disease, or injury, arising prior to the date of acceptance of this application. **I reserve the right to return the policy within 10 days and receive my money back if I should decide not to continue it.**

Dated this _____ Day of _____ 19____

SIGNATURE _____

(Applicant) Head of the Family or Individual Applying Be Sure to Sign
WRITE—DO NOT PRINT

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Mechanical Engineering
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Safety Engineering Tech'l'gy
Tool Design

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Oil Field Technology
Petroleum Production
Petroleum Production Eng'r'g
Petroleum Refinery Operator

PLASTICS
Plastics Technician

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Air Conditioning Maintenance
Domestic Heating with Oil & Gas
Domestic Refrigeration
Gas Fitting
Heating
Heating & Air Conditioning with Drawing
Plumbing
Plumbing & Heating
Plumbing & Heating Contractor
Plumbing & Heating Estimator
Practical Plumbing
Refrigeration
Refrigeration & Air Conditioning
Steam Fitting

PULP AND PAPER
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Paper Making
Pulp Making
Pulp & Paper Engineering
Pulp & Paper Making

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Car Equipment Fundamentals
Motive Power Fundamentals
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Salesmanship
Salesmanship & Sales Management

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RAILROAD MAGAZINE

The Magazine of Adventurous Railroading—Founded 1906

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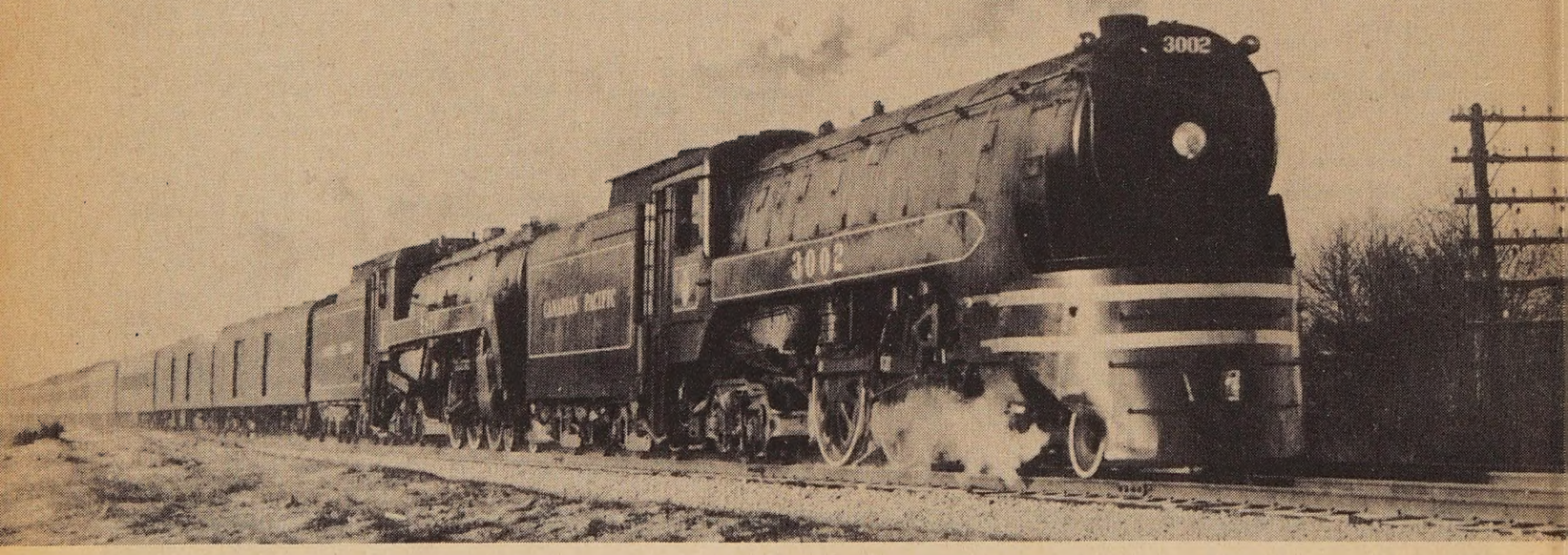
The Canadian, **doubleheaded by engines 3002 (4-4-4) and 2856 (4-6-4) ten years ago, was then the Canadian Pacific's Chicago-Toronto overnight limited train numbered 20.**

W. H. N. Rossiter
Oakville, Ont., Canada



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MAIL CAR

Railroaders and Fans Sit in With the Editorial Crew

Condr. Bill Black, who has worked 37 years for the SP without injury, gives "all OK" signal to another conductor after a rolling inspection of his train.
Photo by Edward Carroll, Southern Pacific safety supervisor

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THE ASSASSINATION of President Kennedy, unlike that of President Garfield, did not occur in a railroad station but was perpetrated very near the Dallas Union Terminal.

"The underpass that the Kennedy motorcade had started through at the time is where three streets funnel together and go down under the depot tracks," writes Avery F. Von Blon, Jr., Box 6422, BU Station, Waco, Texas. "Just south of this is the big downtown post office, with a shed where mail is handled for trains and trucks, and then you come to Union Terminal, within 1,200 or 1,500 feet of the murder."

John F. Kennedy did some of his Western campaigning for the presidency on the traditional rear platform of an observation car, but he was not basically a railfan, and his flag-draped casket went to Washington by air rather than by rail. Franklin D. Roosevelt, on the other hand, was very fond of trains. During his long tenure of the White House he journeyed 243,827 miles by rail, 83,562 by sea, and only 26,775 by air.

The list of Presidents and ex-Presidents of the United States for which funeral trains were operated includes Lincoln, Garfield, Grant, Harding, McKinley, and FDR. Also Jefferson Davis of the Confederate States of America. *Railroad Magazine* had a detailed account of these trains in an illustrated article entitled "Seven Coaches Painted Black" (Dec. '62).

The presidential armored car *Ferdinand Magellan,* now retired and on display in Florida on the University of Miami south campus, was originally sold to the Federal Government by the Association of American Railroads for $10, not $1 as our February issue stated. L. I. McDougle of AAR public relations sent us this correction.

Unlike Kennedy, President Johnson is a railfan. Just after his election as Vice President, he decided to give some friends silver cuff links engraved with a picture of the observation platform on his campaign train. He didn't have the necessary picture for the engraver to copy, so his engraver borrowed one from *Railroad Magazine,* and to show appreciation he gave us a pair of the engraved cuff links. Your editor wears them proudly on special occasions. ●

A SINGLE rail line can haul 48,000 commuters in one hour. According to a Brookings Institution survey, it would take 20 motor highways of four lanes each to transport the same number of passengers during the same period. Furthermore, railroad cars with 48,000 seats occupy only a small fraction of the parking space needed for that deluge of automobiles. It has been estimated that if all commuters who now come into midtown Manhattan by

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Learn Radio-TV, Electronics-Automation by Practicing at Home in Your Spare Time

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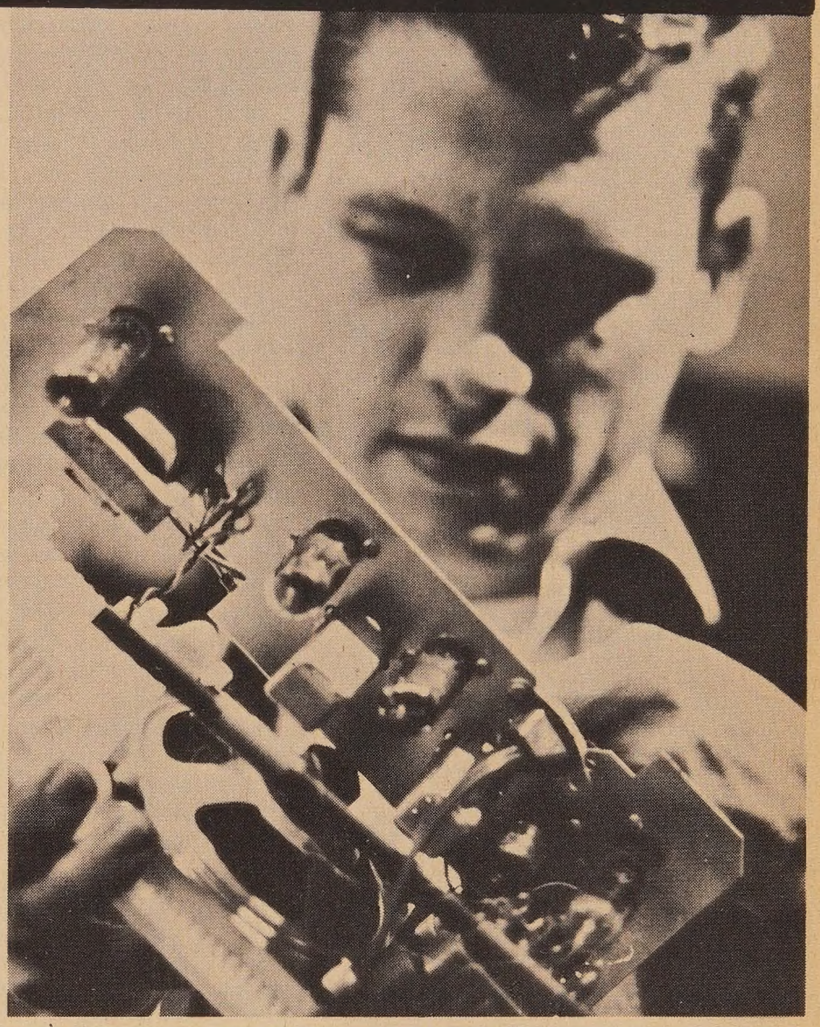
If your problem is, "How can I get my hands on more money *fast?*" a proven solution is: start NOW to be a Radio-Television Service Technician. Just as thousands of other men who trained with NRI have done, you can be picking up $3, $4, $5 an hour in spare time starting soon after you enroll. Many NRI-trained men move ahead to full time businesses of their own. Others find good paying jobs with Radio-TV service shops, distributors and dealers. Still others step up to career positions in industrial and military Electronics and in the growing field of Automation where trained technicians are in demand.



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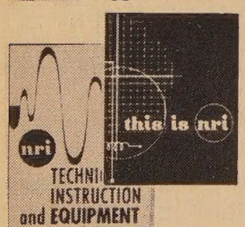
There is nearly half a century of experience behind the NRI course you take. Nearly fifty years of simplifying and perfecting home-study techniques to make learning faster and easier for men like you. Nearly fifty years of careful development of special training equipment NRI furnishes *at no extra cost* to build in your own home, work experiments and "learn by doing." NRI equipment is designed to make clear the things you read about in illustrated, easy-to-read lesson texts. Thanks to NRI's pioneering home-study techniques, even men who didn't complete high school can successfully launch new careers as Service Technicians. Find out *now* about NRI training, opportunities in Electronics, payment plans. Mail the coupon. NRI TRAINING, Washington 16, D.C.

NRI Has Trained Thousands

EARL GROSS, Hanover, Ont., has spare-time Radio-TV service shop. Does work for four dealers. W. F. KLINE, Cincinnati, Ohio, went from factory laborer to his own business with sales of $158,000 in one year. F. W. COX, Hollywood, Calif., averaged $150 a month spare time while training, now has his own full time business. E. DUANE BITNER, Northfield, N.J., works on missiles. He says, "NRI training gave me the biggest boost in my life."



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rail were to use autos instead, New York City would have to spend about $660 million for additional expressways and parking areas. ●

OUR cover shot of the Rio Grande's steam operation was made by Gordon R. Roth and shows No. 480, a Mike, nearing Cresco water tower on the narrow-gage line in Cumbres Pass, Colorado. Although this area is still under steam, the old wooden tank usually stands idle.

Gordon is 36, a bachelor living in Short Hills, N.J. (43 Woodland Road). He served as a Navy photographer in World War II, graduated from Rochester Tech, worked for Eastman Kodak, and is now on his own, specializing in advertising photography.

He and John Briggs run the North Jersey Recording Co. (Box 2, Maplewood, N.J.), commercial producers of hi-fi railroad sound discs such as *Rods, Wheels & Whistles; Rio Grande & Silverton, Reading Steam, Reading 2124, Fast Freight on the Nickel Plate,* and *Steam in the High Country.* ●

NEWS BRIEFS. A Georgia Railroad passenger train en route from Atlanta to Augusta was halted for about an hour the other day by a sheriff and a lawyer, armed with a court order to collect $8,000 or seize the diesel locomotive. The road then paid the money, an award for the death of a man and woman killed in a 1961 auto-train accident, and the train was released.

The Milwaukee Road has just begun to operate the fastest regular freight train ever offered between Chicago and Seattle, Wash. Total running time is 55½ hours, only a few hours more than some transcontinental passenger schedules.

Last November 16th the *Virginia Creeper,* a Norfolk & Western mixed train, made its final run as a round trip between Nella and West Jefferson, N.C., 15 miles, with GP-9 diesel No. 678, a boxcar south, and a coach-combine, laments one of its three passengers, John Hickman, Belmont, N.C., who has info. on that line and many pix.

Studies in the feasibility of forming a New England rail system, including the Boston & Maine, the New Haven, and the Boston & Albany (NYC), are being made by five major Eastern railroads. Norfolk & Western and Pennsy joined the three New England lines in this project because they recognize the need for maintaining rail service in that area. The BAR is a freight-only road.

One of the worst wrecks in railroad history occurred at Yokohama, Japan, last November when 162 persons were killed, including one American. A Tokyo-bound passenger train rammed into a derailed freight, then caromed off into the coaches of a commuter train speeding in the opposite direction.

Cover photographer: Gordon R. Roth

By cutting round-trip fares by about 20 percent between January 10 and April 30 the Santa Fe is attracting new passenger business.

The Long Island's new Islip station is topped by a weathervane shaped like a woodburning locomotive, designed by commuter Richard Boyd and made by a high school senior, Bernardino Genchi, 57 Birch St., Islip, N.Y.

We don't know who started the practice of using lightweight carts on which passengers trundle their luggage through the station to and from trainside, thus saving the cost of porter's tips. The first ones we saw were in Grand Central Terminal. Now we learn that several Louisville & Nashville stations have been equipped with such carts. Maybe readers will tell us which other roads use them.

Time magazine takes this crack at featherbedding: "One engineer tells of a fireman who always brought bedroom slippers to work. 'I didn't mind that so much, but it got to be too much when he brought blankets one night, then complained he couldn't sleep because I had the lights on in the cab,' "

When *The Flamingo's* diesel locomotive nearly ran out of water the other night at Berea, Ky., on the Cincinnati Division of the Louisville & Nashville, the town's fire department came to the rescue. With siren screaming, a fire engine sped to the scene. It hose connected the diesel with a local fire plug, enabling the locomotive to take a 1,000-gallon drink.

The westbound *George Washington* was the last Chesapeake & Ohio passenger train to pull out of old Central Station in Louisville, Ky. Since then, the C&O has been using Union Station, owned by L&N, in the same city. Gala festivities marked the change-over.

"Look who's smiling now!"

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Bay Ridge Yards used to be the terminus of through electric freight service from New Haven Railroad points via Hell Gate Bridge, the New York Connecting Railroad, and LIRR, with most cars destined for car-floats and New Jersey railroads. This service has long been dieselized, with the catenary de-energized for nearly 5 years.

A milestone in the history of railroad safety was the recent ceremony marking the four millionth mile of railroad track inspected over a 35-year period by Sperry Rail Service, a division of Howe Sound Co., Danbury, Conn., and New York City. A new type rail-detector car, No. 402, can run up to 60 mph, although testing is done at 10 to 15 mph.

Washington Street tower in Milwaukee, the busiest interlocking setup in Wisconsin until about the 1950's, is being closed, reports Walter Dawson of Milwaukee. The joint C&NW-Milwaukee Road tower's traffic began easing up with the changes brought about by the North Western's Heineman management. ●

A GREAT engineer, Lloyd J. Hibbard of Pittsburgh, Pa., who took a leading role in Pennsy electrification, has just been awarded the Elmer A. Sperry medal for his "vision and persistence in applying the ignition rectifier to railroad motive power." This rectifier changes commercially available 60- or 50-cycle alternating current to direct current, which is commonly used in railway electrification because of its greater flexibility of speed control.

The first experimental multiple-unit car equipment using an ignitron rectifier was road-tested successfully in 1949. Since then, locomotives and MU car units utilizing this type have been built for the Pennsy, Virginian, and New Haven. Although the ignitron rectifier is popular on railroads in Great Britain, Japan, the Soviet Union, and Portugal, it has not been generally adopted in the United States, due largely to the widespread use of the diesel-electric loco here. ●

DEMOLITION work is proceeding on New York's classic Penn Station. This famous landmark will be replaced by a modern sports center and 33-story office building, with the railroad facilities underground. *The New York Times* brands this project "a monumental act of vandalism."

But you can't blame the Pennsy too much. Taxes alone on that majestic building had reached the staggering sum of $1,480,000 a year! It seems to be a popular sport to "soak the railroads." New York Central is paying even more fantastic taxes on its Grand Central Terminal, $6,660,000 a year! Drab old South Station in Boston shells out $1,051,000 in annual taxes.

Penn Station is thus following other rail depots, large and small, into oblivion, National Geographic Society notes. Faced by dwindling passenger traffic and rising costs, railroads are virtually forced to sell their buildings or modify them for other uses.

The owners of Washington Union Station (taxed $298,000 a year) have offered to sell it to the Federal Government for one dollar. The monumental structure, once described as "a vast Roman palace," has been ornamenting Capitol Hill since 1907. The grand concourse holds 50,000 persons comfortably, but the vaulted chamber now serves only a handful of passengers.

In Baltimore, the old Mount Royal Station was closed in 1961. Once considered the most splendid terminal built and used by a single railroad, the Baltimore & Ohio, Mount Royal was serving only 200 commuters a day when it was shut down.

Some large stations have adapted to the times and survived. A tower of offices now occupies the valuable air space above Grand Central Terminal, and the station's concourse is rented out to various users.

In Waterbury, Conn., the terminal houses a newspaper office. A barrel plant took one station in Philadelphia; a supermarket, another. Boy Scouts meet in an abandoned station at Herrin, Ill., and Girl Scouts assemble in another at Flossmere, Illinois.

The depot at Byars, Okla., was sold to a clergyman, who converted it into a church and parsonage. It's disconcerting to learn from Otto Weiss that the City Parking Authority of Hazleton, Pa., has decided to buy the Lehigh Valley's abandoned passenger depot there and develop the site as a bus terminal and parking area. ●

ARE the railroads prosperous? Looks like it. Atlantic Coast Line has just ordered 1,000 new boxcars from Pullman-Standard. The Chicago & North Western is opening Proviso Piggyback Plaza, the nation's most modern piggyback terminal designed solely to handle highway trailers on railroad flatcars, in its Proviso freight yard 14 miles west of downtown Chicago.

Canadian wheat sales to Russia this winter are so heavy that the Canadian National and Canadian Pacific have had to press into service every piece of available equipment. Norfolk & Western has just bought 50 huge, covered hopper cars. Erie-Lackawanna has ordered 575 new freight cars. Pacific Fruit Express, owned jointly by SP and UP, is acquiring 1,000 mechanical refrigerator cars. In fact, the list is so long that it would fill a whole column. ●

ALVIN F. HARLOW is dead. The author of 20 books and hundreds of articles in magazines, including *Railroad,* passed away last November at age 88. Harlow is best known for his *Treasury of Railroad Folklore,* in which B. A. Botkin collaborated. His other books include *Steelways of New England, Old Waybills, The Road of the Century* (NYC), and *Brass Pounders.* Now and then he would visit our office seeking elusive bits of information from our files. We remember him as a modest, warm-hearted, and scholarly gentleman with a rich fund of anecdotes about "the old days." Says Frank P. Donovan, Jr., our railfan-of-the-month: "I knew Mr. Harlow for more than 35 years. He encouraged me a lot in my writing." ●

BRITISH RAILWAYS are gradually getting rid of steam. Today, 80 percent of their passenger service is operated by diesel and electric power. Running times of more than 300 trains, including *The Flying Scotsman,* have been cut by between 10 and 95 minutes.

"I think the intention is to scrap all steam on the Western Region within two years," comments John Drayton, engineer, 13 Sycamore Rd., Griffithstown, Pontypool, Monmouthshire, England. "I have just passed my driving test for 1750-hp C-C diesel-electrics and can work in multiple hauling 1000 tons of coal on braked wagons (gondolas) up to 50 miles per hour.

"Steam has gone from Sweden. I noted on a recent visit there the prevalence of overhead trolley with pantograph and diesel MU's. I saw some smartly-groomed women engineers.

"British steam loco No. 60008, the *Dwight D. Eisenhower,* has been withdrawn from service and will soon be sent to a permanent home in the United States. (Smithsonian Institution, Washington, D.C.) This is the third Gresley streamlined Pacific to be preserved. Another engine of this famous class, No. 60022, the *Mallard,* with 80″ driving wheels, holds the world's speed record for steam, 126 mph. She is being preserved for all time here in Britain."

Doncaster, England, birthplace of the *Mallard,* built and repaired steam locos for 96 years but stopped it last fall and is now devoted to diesels. The final steamer handled there was, like the *Mallard,* an A4 class Pacific, the Union of South Africa No. 60009.

Our British friends still refuse to admit the Pennsy's claim that No. 7002, an Atlantic type, hit 127.1 mph on a three-mile stretch of high iron in Ohio in 1905. That dispute, like the one over blame for Casey Jones's fatal wreck, will probably never be settled. We, too, honor the *Mallard.* We're mighty glad she won't be scrapped like the 7002. And we will be proud to welcome the 60008 when she visits us. ●

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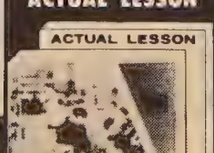

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ONE NIGHT ON A SOUTHBOUND LIMITED

by Frank P. Donovan, Jr.

Photograph by David Plowden

MY BRAIN is a picture gallery of trains. I often think of meals eaten in the diner and nights spent in the sleeper, of girls I met on my journeys by rail and girls I would like to have met but didn't. Before me sweeps a haunting panorama of seagulls and inlets and crossing watchmen seen from train windows. I hear again the sounds of lonesome whistles, wheels clicking over rail-joints, and the thunder of steam locomotives climbing mountain grades. I recall the smells of fragrant pine trees and salt sea air, of coal smoke and hot oil, and of dusty track ballast on a hot day.

Most poignant to me is the memory of a certain night long ago when a southbound limited that I was riding stopped at a water tower and what I saw there. I will tell you about it. But first I must get off my chest some other impressions of trains. E. B. White wrote in his best-seller, *Points of My Compass*: "A state without rail service is a state that is coming apart at the seams, and when a train stops at a village depot anywhere in America and a passenger steps off, I think that village is in an enviable condition . . ."

To date, only Hawaii of all the fifty states in the Union has sunk to the doleful position of being without passenger trains. But several others have come very near it. Ever since World War II ended there has been a slash-

"As I write, the '400' is pulling into my home city, Minneapolis, on its last run from Chicago. Passengerwise, that ends the Chicago & North Western in the Twin Cities." Photos show the train finishing and (right) beginning its career.
Chicago & North Western Railway

ing of passenger runs in America. No other country has experienced such a mass exodus away from the rails. Some nations, like Japan and the Soviet Union, have reversed this trend. The railroads there, more than ever before, are top dog in handling inter-city travel. Especially in Japan, which is almost ready to open its new high-speed Tokaido Line.

Without going into the economics of this American phenonemon or passing judgment on the parties involved, I would like to show that the discontinuance of each passenger train dims the railroad's image in the public mind. Nowhere had the railroad meant so much to so many people as in our United States. Now you can almost say that nowhere does it mean so little.

Nearly 300 passenger trains in the United States have been dropped, partly dropped, or slated for discontinuance since Congress passed the 1958 Transportation Act whose section 13a permits carriers to pull off any train which they can prove is being operated at a substantial loss.

EVEN before that, from 1948 through 1957 the great New York Central cut its far-flung passenger-train miles 41 percent, a startling figure!

Howard Hosmer, an ICC examiner, remarked some time ago: "If railroad passenger-miles, other than commutation, continue to decline at the average rate of reduction betwen 1947 and 1957, the parlor and sleeping-car service will have disappeared by 1965 and the coach service by 1970."

I can't accept this alarmist prediction, especially in view of the aggressive fight now being waged by the Seaboard Air Line and several big Western roads to improve their passenger business. But not all carriers are showing so much initiative.

"Here in the East particularly," wrote Washington columnist George Dixon, "most of the railroads seem to feel passengers are unwelcome intruders to be discouraged at all costs."

The Central is not doing much to counteract this impression. W. R. Main, its assistant vice president for sales and passenger service, is quoted as saying: "Our program for eliminating unprofitable, little-used, branch-line passenger service is constantly before us. During 1962 we secured permission to discontinue approximately 30,000 unprofitable train miles on an annual basis."

But not all Eastern roads regard passengers as "unwelcome intruders." Take, for example, the combined Chesapeake & Ohio and Baltimore & Ohio. A joint message from the presidents of those two lines says: "Although passenger-train services are a comparatively small part of total operations, they are an important way in which the public becomes aware of us and judges our performance generally."

About 90 percent of all inter-city passenger traffic in this country today is by automobile. The rest, a mere 10 percent, is divided among trains, buses, and airplanes. The last-named have taken over the bulk of the trans-continental business, which you might call the cream of the crop. Even so, the railroads are now fighting back.

Freight was, is, and will continue to be the mainstay of the rails, but the passenger train was the showpiece and usually the only contact the average person had with the railroad. Now that this contact is being severed, the steel trail is all but forgotten—except when a freight blocks a grade crossing or the noise of trains keeps people awake at night.

As I write, the "400" is pulling into my home city, Minneapolis, on its last run from Chicago. Passengerwise, that's the end of the Chicago & North Western

in the Twin Cities. Twenty-nine years ago it operated the first streamliner into this area. Tomorrow only two roads (excluding the circuitous Soo Line with a night consist of day coaches) will run between the home of the Minnesota Twins and the Chicago White Sox and Cubs. However, the Burlington *Zephyrs* and the Milwaukee *Hiawathas,* lordly dome trains, are still linking those two points by rail.

Within my lifetime there were seven distinct routes between the Twin Cities and Chicago, not including the Milwaukee's alternate via a pontoon bridge across the Mississippi at Prairie du Chien, Wisconsin. Which were the additional lines? There were two routes through Iowa, the Great Western via Oelwein and the Rock Island via West Liberty, and the trackage through Albert Lea, Minnesota, operated jointly by the Minneapolis & St. Louis and the Illinois Central. Each one had a full complement of sleepers, diners, and coaches. And could the secondary lines fight for traffic? Just ask your father or grandfather.

CONSIDER that once-famous institution, the City Ticket Office. Any city worthy of the name had at least two passenger offices uptown. Remember the strips of green tickets, often pasted together by the foot; the mileage books, and the cut-rate excursion flyers decorating drab walls, along with framed pictures of scenic wonders?

In the heyday of rail travel, general passenger agents used every trick they knew to "get the business." Persistent as insurance salesmen, gregarious as politicians, suave as diplomats, they had an ear to the ground for conventions, picnics, big league games . . . A hot tip and the GPA was off, suitcase in hand, high-priced cigars in pocket, to board a train.

One by one I have seen these agencies go: first the M&StL, then the Soo, followed by the North Western, and finally the Rock Island. Even so, Minneapolis still has the consolidated bulwark which houses the Burlington and Great Northern and Northern Pacific, beside which is the separate office of the Milwaukee Road. Recently we have had a mild recrudescence of the oldtime competitive spirit, with bargain notices pasted on the windows. It

Framed pictures of scenic wonders adorned the drab walls of the Southern Pacific ticket office in Pasadena, California.
Southern Pacific Company

is good to see the roads vie for the excursion dollar again in competition with other modes of transport and with each other.

To those of us in middle age and over, the passenger train evokes a flood of memories, joyous and sad—remembrance of people and of places that once seemed far away. What do the modern teen-agers with their hot rods and smart foreign cars know of the joy of a week-end excursion peppered with cinders from the stack of a steam locomotive?

A hundred-mile trip used to call for a shoebox filled with sandwiches, and a few cardboard tickets which Dad gave to the dignified conductor with much aplomb. A train ride then was a lot more fun than burning up gas today on a concrete highway littered with hot-dog stands, gas stations, billboards.

What does the railroad mean to me? Well, I was born and raised on the outskirts of Philadelphia. How vividly I recall those happy trips to the shore on the Pennsy! No matter how torrid the weather in the big city nor how crowded the ferries were to Camden, the railroad train with its hot, stuffy coaches opened a new world to us. It crossed New Jersey almost while the conductor was collecting tickets. Our first intimation of seashore came with the smell of marshes. The air grew cooler, fresher, saltier.

By the time we reached Sea Isle City the tang of ocean breezes was sweeping through the open windows. Seagulls cut patterns in the blue sky and screamed above the careening train while below, where the restless ocean met the bay, waves splashed against the dark pilings of the railroad trestle. Our American-type engine, a D-16 with a handsome gray smoke plume, roared over the seventy-pound rails. She whistled hoarsely again and again, and she seemed to blow longest and loudest while chugging into Ocean City, where as a boy I spent many unforgetable summer vacations with my family.

FOR ME, the railroad also meant trips on the Reading's fleet MU cars five days a week from and to my home in suburban Wyncote and a Friend's school in Philadelphia. I re-

garded commuting as a daily adventure and looked upon the great trainshed at Reading Terminal with the kind of awe that is usually reserved for old cathedrals.

And it meant going to college in Tennessee on a swanky limited, the *Birmingham Special*. That first night in a sleeping-car berth was too exciting for me to get much slumber. Next morning, with a feeling of elation, I walked into the diner as though I owned it. The only empty seat I could find faced a pretty brunette who sat at a table just across the aisle. I ate slowly to prolong the enjoyment of my orange juice, bacon, eggs, and buttered roll, meanwhile stealing quick glances at the girl. When she finished eating and left the car, I turned my attention to the landscape rushing past my window.

Throughout the trip, men in blue with brass buttons called out the stops. Philadelphia . . . Washington . . . Bristol (Virginia-Tennessee) . . . Knoxville. Then I boarded a friendly mixed train with an old wooden coach and with overalled trainman talking in an easy drawl, on the rural branch to Maryville.

Later, the railroad meant a honeymoon trip with Jan on a Soo Line train from Minneapolis, where we were married, to a Minnesota village beside a quiet lake. That was in wartime, when passengers returned to the rails in droves, and our train resembled a traveling UN with delegates from both sides of the border and from across the two oceans.

And the railroad meant a hastily-planned sad journey on the *Broadway Limited* (my first), the only train on which I could get last-minute space from Chicago to Philadelphia to attend my father's funeral. I remember the colored porter, with sympathy and understanding, who made the ride to my old home seem more endurable than it otherwise would have been.

Recently, after many years' absence, I rode the Pennsylvania-Reading Seashore Lines to Ocean City. I knew, of course, that the two roads had long since consolidated their routes but I had not known that the trains left on that route were few and doleful. There was scarely a handful of riders in my coach, and the trainmen were gray-headed and taciturn. One passenger grumbled at the poor service, another because he'd missed the bus, and a third objected to paying more to go by rail.

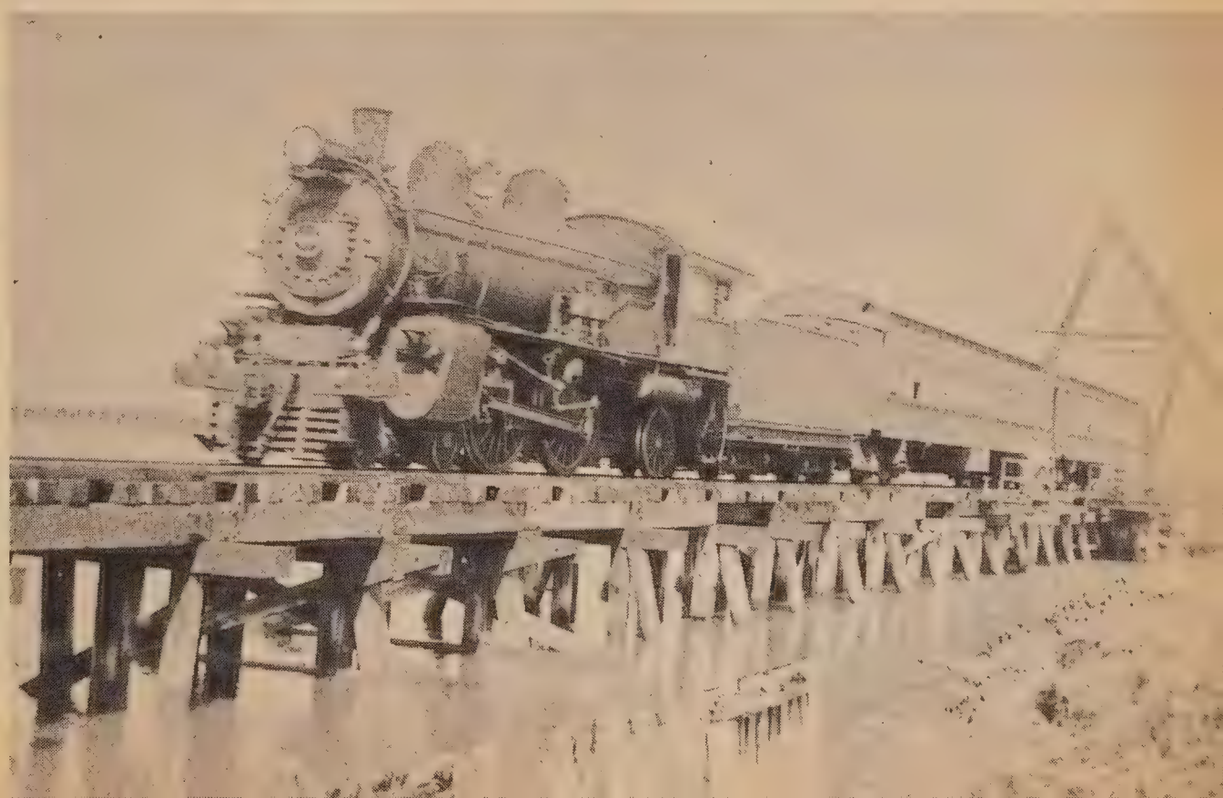
All along the line, especially in New Jersey, I saw the spectre of unpainted stations, some even boarded up, others in various stages of dilapidation. At places where there had been two tracks only one remained while areas which used to have one track now had none.

New Jersey taxes its railroads more heavily than does any other state, with the result that today the steel rails end abruptly at the main depot. Formerly trains ran a couple of miles further north to a thinly populated locality known as "The Gardens." Today this section is all built up. As the population increases the railroad tracks shrink. More highways, fewer trains! Too many automobiles!

MY RETURN trip from Ocean City was even more depressing, with less than a score of riders in the three-car consist. A sepulchral gloom seemed to hang over those near-empty coaches swaying in the dusk. The sun had set; the rehearsal was complete. I almost expected to see the long-faced conductor tiptoe down the aisle and whisper, "Would you care to view the remains now?"

With the disappearance of most passenger trains, the railroad has all but vanished from current American letters. The novel and short story often mirror the contemporary scene. From about 1890 to World War I the railroad was "tops" in passenger transport. The high iron was a-throb with limiteds and locals, and nearly every branch had at least a two-car "varnish". That period was also the Golden Age of railroad storytellers. Such practitioners as Harry Bedwell, Frank H. Spearman, Cy Warman, Francis Lynde, Herbert Hamblen, and Frank L. Packard wrote creditable tales of the industry. Not great literature to be sure; yet authentic, forthright yarns that the general public read eagerly.

In those days *Railroad Man's Mag-*



Pennsylvania-Reading Seashore Lines. "Our first intimation of seashore came with the smell of marshes. The air grew cooler, freshier, salter. By the time we reached Sea Isle City the tang of ocean breezes was sweeping through the open windows. Where the restless ocean met the bay, waves splashed against dark pilings of the trestle." (Left) The railroads sold long tickets in those days. Today the tickets are a more convenient size, but there are fewer trains to ride.

Thomas L. O'Brien, Pennsy conductor on a commuter run in the New York Region.
Pennsylvania Railroad

A Pennsy B6 at P-RSL engine terminal, Camden, New Jersey, nine years ago.
Aaron G. Fryer, Philadelphia, Pa.

azine, which regularly carried such stories, sold more than 165,000 copies per issue, more than twice the circulation of the present *Railroad Magazine* and *Trains* combined.

In those days, too, the big city newspapers had railroad editors, and the magazines frequently printed articles on trains. When *The Saturday Evening Post* cost a nickel and came out every week, men like Edward Hungerford wrote lovingly and colorfully of railroads and railroaders. Indeed, it is hard to visualize the *Post* of my boyhood without a railroad article or fiction story. How different is the situation today! Who cares about railroads any more, except disgrunted stockholders? Aside from accidents, consolidations, and strike threats, they rarely make page one.

Mary Roberts Rinehart, fiction writer of a bygone generation, said that for a long time after publication of her murder story, *The Man in Lower 10,* people avoided berth 10 in Pullmans. Imagine such a thing today! Once a favorite setting for mayhem and homicide, as on the *Orient Express,* the train has been discarded even in the "whodunits." As for rail novelists, James McCague is the only one still in business. His *Fiddle Hill* and *The Big Ivy* have authentic rail settings and received favorable reviews, yet both were "remaindered" after only a few years and are now out of print.

For the more literary-minded, Thomas Wolfe is still available. Few American authors could surpass his love of trains, yet the only present-day contender I know of is Russia's Boris Pasternak, whose *Doctor Zhivago* shows real affection for railways.

Owen Wister once called *The Official Guide of the Railways* "the most interesting book published in America." It is my favorite reference volume and I always have a copy on the desk in my study. I used to spend hours thumbing through its 1000-odd pages, dreaming of places I would see and trains I would ride. But not today.

The old *Official Guide* had something of Homeric splendor with its great name-trains, not a few of which were all-Pullman, some intriguing through-sleeper routes, and thousands of meandering branch-line locals and mixed runs, several of which featured "caboose service only."

I bought my first *Guide* in 1927. Penny for penny, it gave me deeper pleasure than any other publication I have owned. Adventure? It was more exciting than Sherlock Holmes, more romantic than Stevenson's *Treasure Island* or the classic novels by Dumas.

WHAT a masterpiece of Americana, that 1927 issue! The Pennsy and its affiliated lines filled 94 big pages with timetables, including a six-page "Index to Stations." The New York Central had a thumping 91 pages, the Southern Pacific 50, and the Santa Fe and Union Pacific 30 each. Even the little Rutland accounted for four pages.

Before me is a July '63 *Guide.* Its corresponding figures are 75, 39, 22, 34, 30, and 0, the Rutland being *kaput.* But the space now alotted to the various roads is misleading. Several have page after page of branches operated for "Freight Service Only." Each year sees more railroads bidding the passenger good-bye. In the East, the Maine Central and the Bangor & Aroostook have "gone freight." Although the Lehigh Valley was the only tenant road going to New York's Penn Station from the west, the competition from tax-sup-

ported super highways and subsidized jet planes proved too much for the "Valley's" fine passenger service.

Down south, years have passed since Tuscan red coaches rolled on the Tennessee Central. Also toting frieght only are the Norfolk Southern, the Clinchfield, and even the Cotton Belt. Out west, the picture is similar. About the time the North Western absorbed the Minneapolis & St. Louis, the latter's passenger trains took the count. And the North Western is easing away from its "varnish" with alacrity. Of the 10,600 miles of C&NW trackage less than 10 per cent carries the traveling public!

It is a sobering experience to study *The Offical Guide* these days. I scan the pages with trepidation. Will the Monon be next? Or will the Great Western jettison its lone Twin Cities-Omaha mail train, thus beating the Hoosier Line to the draw? What about the Katy's already decimated passenger operation? A silent prayer, please, for the *Texas Special.*

I understand that the Soo Line wants "out" passengerwise. The Delaware & Hudson's once-great *Laurentian* and *Montreal Limited* are not doing so well, either. If they go, nobody will ever again ride the line which the late Leanor F. Loree made into a blue chip property. But you can almost hear the doughty old Loree cackling in his grave; *he* had little time for passengers.

Meanwhile, the bell tolls for old departed friends: the *Olympian Hiawatha,* the *Queen of the Valley,* the *Overland Limited,* and the *Royal Blue,* to mention only a few. It is bad enough when a favorite train is dropped but how much worse when a whole railroad gives up its passenger service! May there never be a time when any of our mainland states, like Hawaii, comes "apart at the seams"!

I remember lying awake one mild luminous evening in a sleeping car on the *Birmingham Special* as a young student on his way to college. Somehow I felt lonesome. Outside my window, a panorama of town and woodland and meadow rolled by, silver in the moonlight. At one place where we stopped for water, little white moths and bugs were fluttering around a kerosene lantern set on a post. Frogs croaked in a silver pond. I couldn't see them but I saw the pond.

I heard, too, the swish of water gurgling into the locomotive tank and then, faintly from a distance, voices singing. Beside the track ran a silver dirt road. Three teen-age girls, their arms linked, moved along that road into the penumbra of lantern light. They were singing *Beulah Land.* I guess they were going home from a church sociable or a prayer meeting.

One of them, slim and hazy and very beautiful, glanced up at me. For a fleeting instant our eyes met. Then she merged back into the shadows and I never saw her again. The voices became dim as the girls walked away. I listened intently, caught in their spell.

Ever since then the memory of that lovely face, blurred and shiny, has been drifting back at quiet moments to haunt me with its untouchable beauty.

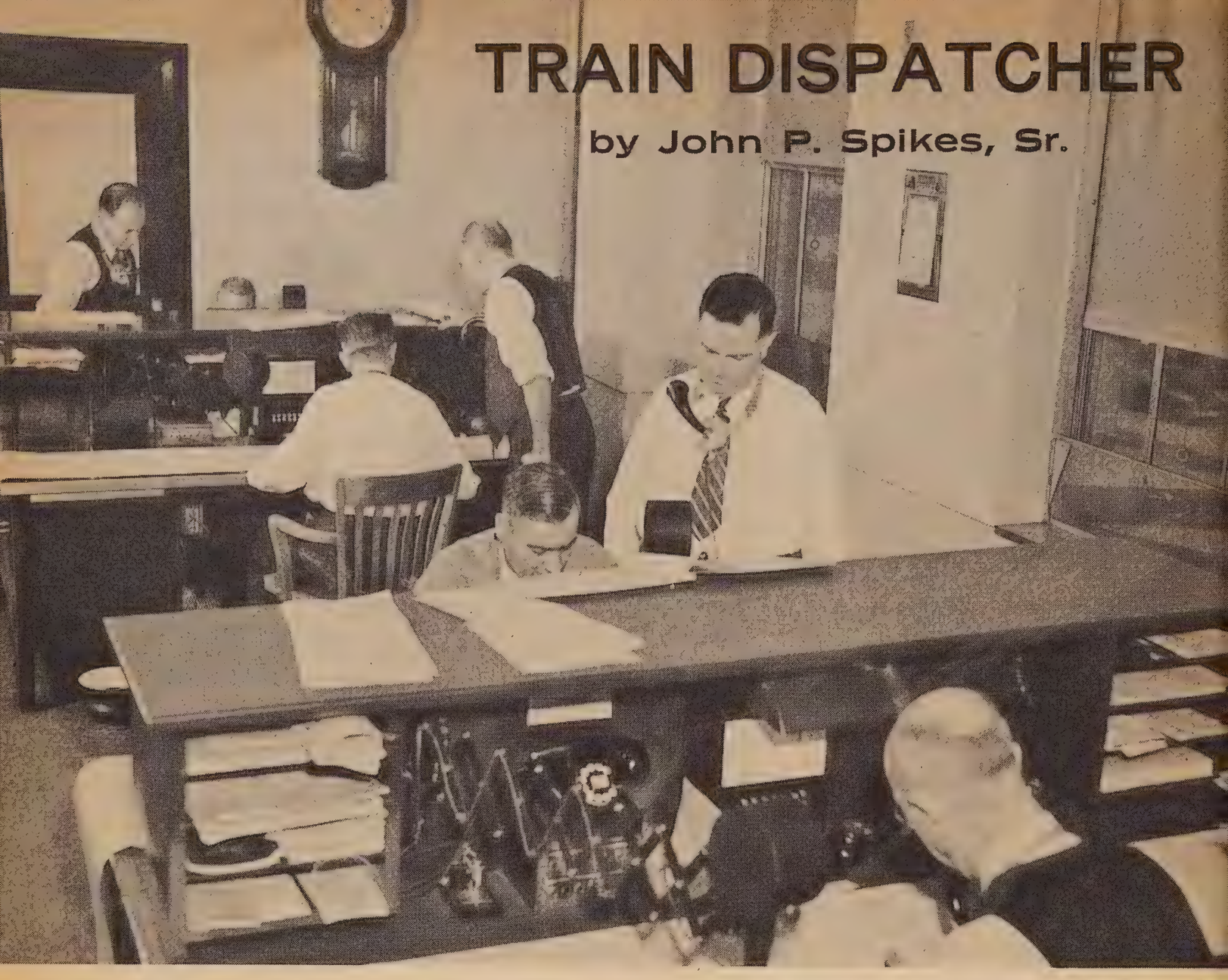
And that is what happened to a college boy a long time ago one night on a southbound limited. ●

Fielding L. Bowman, Oenoke Ridge, New Canaan, Conn.

Recalling a long-ago "night on a southbound limited" is this nostalgic view of a New York Central local, powered by No. 1252, a Ten-wheeler, pausing beside the brick and wooden water tower at Mount Hope, N.Y., on the Putnam Division.

TRAIN DISPATCHER

by John P. Spikes, Sr.



New York Central train dispatcher's office, Syracuse, N. Y. Our author is a chief dispatcher for the B&O at Akron, Ohio.

NOW AND THEN a newspaper feature writer pops into a train dispatching office to do a "human-interest story on the men who handle the trains but never see them." Such write-ups are phoney, as a rule, because the general reporter handles too many subjects to know any one of them thoroughly. The story should be written by somebody on the job. You can't write convincingly about train dispatching unless, as a beginner, you have experienced the sinking, empty sensation in your stomach when another dispatcher transferred several hundred miles of active railroad into your trembling hands and left you alone to fight it out.

Three train dispatchers, including myself, work one trick in the Baltimore & Ohio office at Akron, Ohio. We handle all traffic over 427 miles of double track and 325 of single track, altogether 752 miles of busy railroad through the teeming coal, iron-ore, and steel-mill territory of northern Ohio and Indiana. Our division's double-track begins at New Castle in western Pennsylvania and ends at Pine Junction, Indiana, just outside Chicago. Famous-name passenger trains cover this route, together with redball freight. The single-track branches spread like a vine, three reaching northward to the Lake Erie ports of Fairport, Cleveland, and Lorain, one to the south through the industrial city of Canton, and another southward toward the Ohio River Valley.

Paradoxically, the dispatcher's work may be seen to better advantage away from the downtown office, at one of the interlocking plants beside the main track. Everything inside the tower speaks of the railroad game. The track chart on the board with its colorful lights, the impressive row of levers governing switches and derails, and even the lanterns on the dusty floor in a corner are smeared with the smut and grease of the rails and familiar smell of signal oil.

The annunciator bell tells you an oncoming train has "hit the circuit" beyond the distant signal several miles away, and the place comes alive with action. The tower's high windows open on a wide panoramic view of track layout. If DS in his remote downtown office has given "main track" permission, the train streaks into view and through the limits and merges into the scenery beyond. But if the instruction was "siding" or if a crossover or switching move was ordered, the scene is different, depending upon the mental processes of DS and the figures on his trainsheet.

Legend says that modern train dispatching started one morning long ago

The modern Morse key. Well, not quite modern. Railroad telegraphy is rapidly becoming a lost art which is almost never used any more in dispatching trains.

when a Pennsy division superintendent was late coming to work. Andrew Carnegie, then a young telegrapher, broke precedent by boldly assuming the responsibility for setting things in motion after a major tie-up, bringing in trains that had lain on sidings all night. In those days only the super was permitted to tamper with the movement of trains against timetable superiority, but the alert Scot had transmitted that official's orders on many similar occasions and this time issued the orders himself in the super's name. By doing so, as he wrote later in his autobiography, he risked dismissal, disgrace, and in event of failure, perhaps criminal proceedings. But the initiative and vigor that in time made Carnegie one of the world's richest men prompted him to act in this emergency. He watched the trains' progress from station to station, took extra precautions for their safety, and had traffic running smoothly when his boss arrived.

As a result, Morse telegraphers gradually fell heir to the responsibility for moving all trains, which gave them an enviable status and increased pay.

MANY a bright young fellow in the rural areas began practicing the dots and dashes because of a yearning to get away from the farm. But a lazy, feet-on-table job around the depot had other inducements. Girls on the passenger platforms cast more than casual glances and smiles at the operator because of his high status, the regularity of his work, and his steady income. To the ladies at least, he was a man of the world in close touch with outside events. Even between tain times, girls, singly or in pairs, would stroll nonchalantly past the depot, hoping for a glimpse through the bay window of the brass pounder reclining in a swivel chair and dozing lightly, with his patent-leather-clad feet on the table and one ear in the direction of the chattering telegraph sounder.

In those days, with railroading at its peak, an ambitious Morse man who was willing to work hard had a good chance of eventually becoming a dispatcher, with a fatter pay envelope to bring home to a future wife. The coquettish village belles knew that, too, and made a special play for him.

The modern picture is less rosy. Consolidated train-dispatching districts now extend 900 miles or over. I can sympathize with the fresh-faced young fellow of today just promoted to a way of life that includes more than the average amount of tension, frustration, and criticism. Peter Josserand, a Western Pacific night chief dispatcher, was assembling material for a magazine article on the health hazards of train dispatching when he died suddenly of heart disease, caused possibly by some of the very conditions he had intended to write about. The man who first called a train dispatcher "the aristocrat of railroad labor" must have been a sardonic humorist.

Our three trainsheets in the B&O office here at Akron, if pasted together, would make a continuous sheet over 15 feet long. At the top of a sheet are these words, "The Dispatcher's Record of the Movement of Trains." The sheet also is called the "Master Record of All Trains." It is, I think, the most remarkable railroad document in use today. Deprive a dispatcher of his trainsheet and he is helpless. The sheet has changed very little over the years. Most extraordinary is its ability to compress a division of hundreds of miles into a sort of picture window on the dispatcher's table. It is a kaleidoscope through which we watch the continuous movement and progress in our territory.

When a train leaves its starting terminal it also moves out on the sheet. At each open train-order station the time, or OS report, is flashed to the dispatcher. The train advances on the sheet exactly as it does on the road. I can spot the location of any train in my district at a glance. Time used between stations shows the kind of a run being made and, in case of a drag, to what point it may be safely shoved ahead of the varnish or hotshot freight.

But suppose the dispatcher places an OS report in the wrong hole. It then shows one train ahead of another when the opposite is true. If an inexperienced DS gets too many time reports in the wrong hole or column, he loses the railroad—lets it get away from him—and may be sent back to a station job or the tower or the farm, depending on the kind of mix-up.

Even if a train should leave a terminal without being cleared and recorded on the street, an accident might still be avoided. A towerman once remarked. "The Lord may love the railroader but he lets the railroad run itself." Strict rules that a train must be cleared by the dispatcher and that the men on the front and hind ends must have the tissues in their pockets prevents the crew from running wild.

REPORTERS ask about certain heiroglyphics on the trainsheet. These are small reminder marks placed by the dispatcher to call his attention to something that has occurred or will occur on the line—a setout or a pickup, for instance. A tiny flag drawn in ink indicates a train held out of a terminal, showing that the delay may be due to the terminal trainmaster or yardmaster. An X mark at a siding is a reminder that the siding is blocked. If DS overlooks this little mark and heads a train into the blocked siding he may lose his job, the bank may take over his home, and his wife may go back to mother.

Red ink on a trainsheet of double track screams that a train is being "single lined" against the current of traffic and calls for absolute protection. Another mark beside a train column at a station or between stations advises

CTC has just been installed on the B&O's Akron-Chicago Division for 135 miles between St. Joe and Pine Jct., Indiana. We see new equipment in Akron office. Modern methods are replacing old ones in train dispatching as in everything else.
Baltimore & Ohio Railroad

that a delay has occurred but refers to the bottom of the sheet where a section is headed, "Extraordinary and Unusual Occurrences."

That term is misleading because present-day management requires every delay to be recorded. The section is filled with accounts of signal failures, hotboxes, brakes sticking, train parted, burst airhoses, engine failures, and the like. Unusual incidents *do* happen on a railroad, of course, and the dispatcher handles them accordingly.

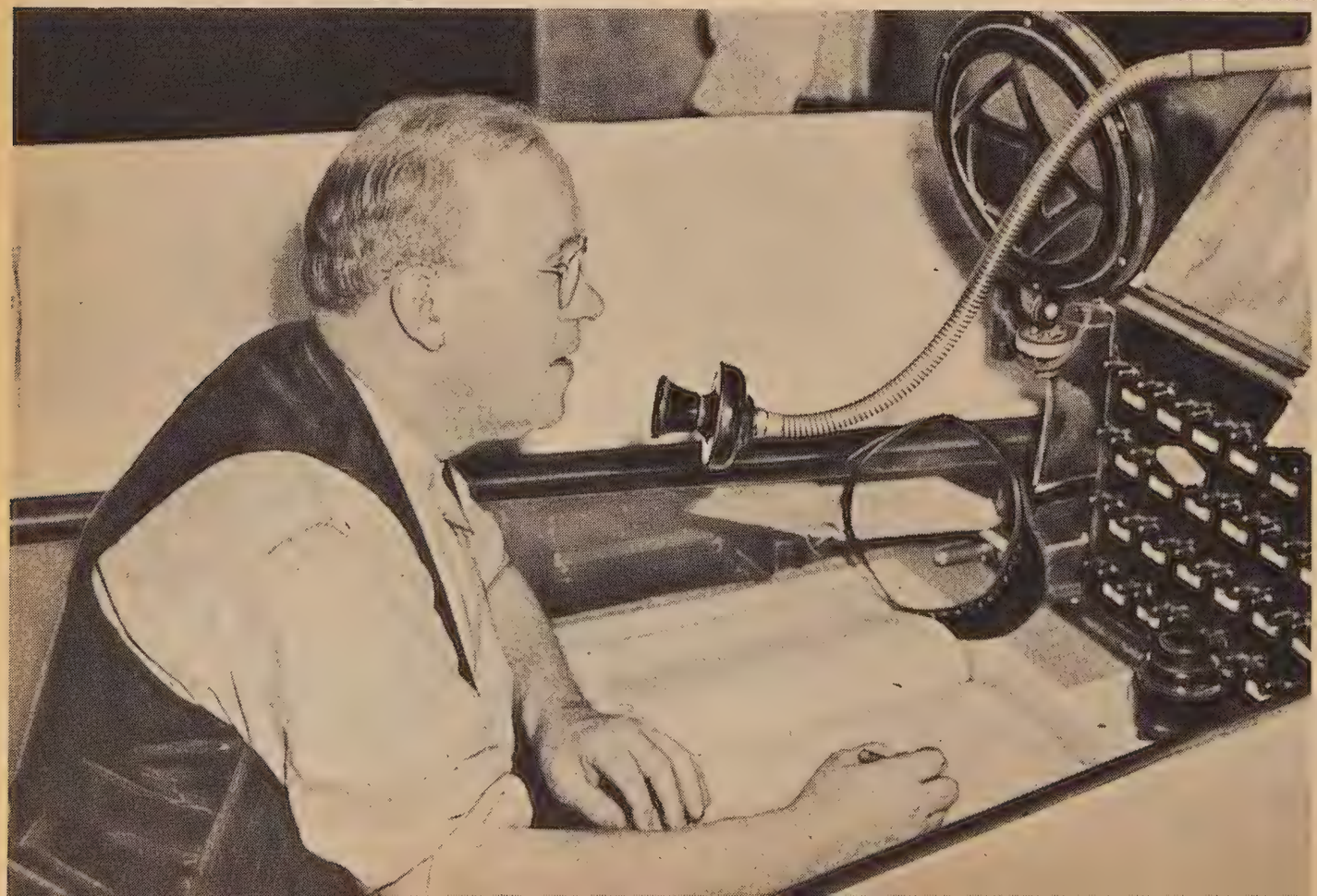
An old hobo hits the rails, climbs to the top of a three-decked automobile carrier, and slips through the unlocked door of a shiny new Buick. He is enjoying a grand view of the passing real estate as he glides by a tower, riding high and handsome. The DS pays scant attention to free riders, but when a towerman reports such a passenger, he notifies the bull at the next terminal to "punch his ticket."

Another 'bo, riding a train in zero weather, may build a fire in a boxcar to keep warm and set fire to the floor. He is removed at the next station and escorted to a well-heated jail. An engineer on a branch line reports killing a horse but adds defensively, "It was the horse's fault." A head brakeman reporting the derailment of his train is asked if there were any injuries. He says he fell from the crow's nest onto the caboose stove and "hurt his ass." What the head shack was doing in the caboose has not been determined, but he probably missed the front end.

When livestock has broken fences and wanders on the track, DS may notify engine crews to look out for cattle or other stock on the track. A curious dispatcher once asked an old steam engineer what the crew on the head end did when they got such a message. The hogger grinned wryly. "We get behind the boiler," he said.

One DS in our Akron office works over a trainsheet 75 miles from the *beginning* of his dispatching district. He asks a towerman in western Indiana if he can see the headlight of an

(Left) N&W dispatcher in Bluefield, W. Va. (Rt.) An oldtime telegrapher.
Norfolk & Western Railway



overdue train and the operator replies that the sun is shining there. The DS glances at the darkness outside his window, rubs the dampness from his forehead into his rumpled hair, and gets a feeling of remoteness, of distance and detachment. This part of our territory will have gone into CTC operation before you read these words.

The man referred to handles 278 miles of double-track mainline railroad. He picks up the initial OS or "out of station" report of a fast passenger train 75 miles from where he sits, follows it through territory which he has cleared and is still clearing up in advance, and sees that it gets "high green" past 30 operating passing sidings, through 23 interlocking systems, by 24 depots, and over the crossing frogs of 20 "foreign" line railroad crossings. The train speeds off his territory at Pine Junction, Indiana, but he gets the terminal OS from Grand Central Station, a few blocks from Chicago's Loop.

A DISPATCHER looking out over his territory today sees a number of conditions that do not make him happy. For one thing, his sidings, built earlier for smaller trains, are too short to clear the big drags of 175 to over 200 cars that we run today. A drag comes out of a terminal ahead of a speedy passenger or redball freight, and DS has few sidings where it will fit. The double-track dispatcher is reminded that he has *two* tracks and is told to use them. But if he uses both tracks at the same time and thus delays high-priority trains rolling in the opposite direction, he has the pleasure of explaining to his boss why the operation went sour.

The actual train movement over a given division at one time might be somewhat like this: three passenger and eight freight trains of different classes, running at varying speeds, four of them peddlers, some moving and others doing local work, setouts and pickups.

This may not seem like much traffic but it consists roughly of about 40 varnished cars, 50 or more diesel units (two to six on each train), and 850 cars of valuable merchandise. Add to this two maintenance-of-way work trains, three pieces of track machinery, including a ballast-cleaner working on one main track and fouling the other, and a number of track cars using the main track under the protection of the DS. This gives you the idea that there are obstacles in the way and there is more to the business than putting one train into a siding for another.

But despite all this, the dispatcher's work is carried on so smoothly that it is normal for a passenger or redball freight to operate the length of a division without a delay.

Train dispatchers work closer to the management than any other employee. There is much recent evidence that the company recognizes and appreciates their work. A pleasant rapport exists between officials and dispatchers on our B&O division, whatever it may be elsewhere. The big railroads everywhere have no more valuable asset than the experienced dispatcher who displays a kind of wizardry in predicting running times to the minute and, looking far ahead of the train to where it must go and where it will be in an hour or two, clears the line of all obstacles or else routes the traffic safely around them.

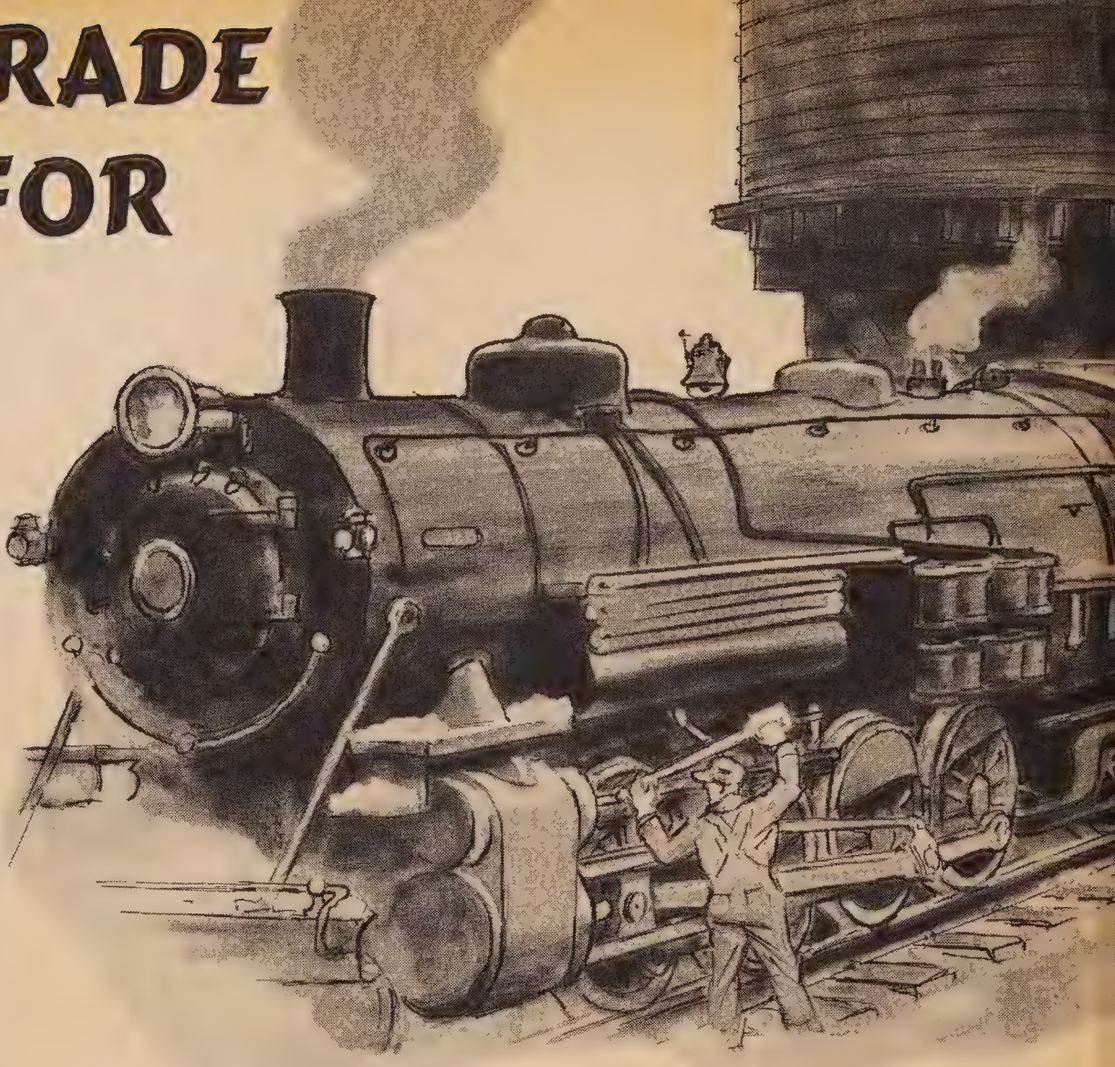
As the late Peter Josserand once wrote, the train dispatcher is the railroad's biggest bargain. •

Scene in B&O dispatchers' office at Akron; John P. Spikes is standing.

Frederic Shaw

DON'T TRADE WATER FOR STEAM

BY ED LOHR



PICTURES of blown-up boilers used to adorn Baltimore & Ohio enginehouses at the place where the engine crews registered their arrival, usually with some caption like, "This could happen to you!" or "Don't trade water for steam!"

Looking back over my years at the throttle, I wonder if there was any hogger who never traded a precious supply of water for steam at some crucial moment. He'd have been on the carpet time and again trying to explain steam failure and why he had tied up the railroad with a dead engine when little trading would have got him over the hill. The real question was, How much water could you trade safely?

This was no problem to the man who ran a switcher. He could stop and fill his boiler whenever he wanted to or take a rest and build up steam. But for those of us who rawhided tonnage freight or hotshots or passenger there were plenty of times when the fireman had his hands full with a poor-steaming engine or poor coal.

We worried about how fast our coal was going, of course, but water was uppermost in our minds: how much water was in the boiler, how much was left in the tender, and where the next water stop might be. When I first qualified to run over the B&O and the Reading as far as Wilsmere, Delaware, an old hogger said to me:

"Never forget you are all alone; and if your fireman or brakeman says, 'Go ahead, you've got enough water to make such and such a place,' just keep in mind that if something should happen *you* would be held responsible."

Knowing that this was good advice, I never asked a fireman how much water I had left; yet despite my vigilance there were three times in my career when I had to pull the fire on an engine I was running. Two of them were due to engine failure.

One day Mikado 875 developed a defective feedwater heater and the water in the tank got so hot that, even with a foot and a half of depth, neither pump nor injector would take it.

Years later I ran dry with another Mike, the 860, because the shop had put on a larger injector and not told me about it. Besides that the new injector was faulty and would siphon water through the overflow onto the ground when the tank was more than three-fourths full, all of which was unknown to me.

The second incident occurred when I was on the engineers' extra list at Jersey City and was called for train No. 697, a B&O fast freight handled by a Reading crew whose home terminal was Philadelphia. The Reading engineer had reported off sick at Jersey City, so I was to run the Mike to Philadelphia that night with a Reading fireman, and deadhead home.

I didn't expect to have any trouble with the 4484, even though I noticed she had a Vanderbilt tender, one of those cylindrical types, and I didn't suspect it would prove my undoing.

After we had taken on water at Cranford I asked the fireman, "How'd she do coming east?" He said, they had run from Lawndale, near Philadelphia, to Cranford on a tankful; so I assumed we could easily make the return trip from Cranford to Lawndale.

We rolled west across New Jersey with me pumping the water, the fireman having said he never took care of it, which was strange, as our firemen on stoker-fired engines always handled the water and it was only on Camelbacks that the engineer did that job. The 4484 seemed to be holding her water fine, but I found it later was because her injector had a larger capacity than ours and was putting in more water than ours did.

After passing Neshaminy Falls my injector kicked off without warning. Up went the pop valves, blowing away water fast. I could not get the injector to work, So I yelled to the fireman:

"Try and get your injector on!"

But he couldn't get his even to prime. Thereupon I scrambled back over the coal and yanked off the manhole cover to see how much water was left, while we were batting over the dark hill using what water we had in the boiler and no more going in. When I shoved a firehook down in the tank, it showed a foot and a half of water, so I sighed with relief. With one of our own engines that would have been plenty.

I crawled back over the coal and

A RETIRED ENGINEER RECALLS THREE TIGHT SPOTS IN HIS LONG CAREER ON THE JERSEY CENTRAL

got my injector to work, since we were now on level track and the water was no longer hanging back in the tender. Not wanting to lose speed, I laced her along unmindful of the awful truth: I had next to no water in the tank!

Suddenly the injector kicked off again and this time I couldn't wrestle it back on. We had no water to trade now. We were dry, and up went the pop valve. I was getting grey hairs and sweating blood as we drifted into Lawndale with no water showing in either glass and nothing but blue steam coming out of the bottom gage cock.

When we got almost to the water plug I made a decision which was to bring many days of unhappiness. Since I didn't want to inject cool water into that overheated boiler, I made a frantic effort to locate the water level by setting the reverse lever on center, applying the brakes, and opening the throttle wide.

This procedure usually raises the level of water that is in the boiler, but she was so parched that nothing came out of the bottom gage cock except blue steam. By this time the iron was stinking hot and groaning with the heat, or so I thought, and I was afraid that any second something would let go with a wham.

"Knock the fire out!" I told the fireman.

Out fell a shower of orange-colored coal, leaving the 4484 a lot safer but dead as a log. Going to a phone, I called the Reading dispatcher and was informed that he would send a drill crew to pull us to the B&O.

To my great disappointment, their engine arrived headed east, and since we were pointing west the two pilots came together and there was no way to couple on for a tow. We had to stand by for another hour till they sent us a B&O road engine which had been waiting to take over our train at East Side, and she backed up to us properly.

I DEADHEADED home an unhappy man. I knew that with a Jersey Central engine a foot and half of water would have been plenty, since the lower part of the tank extended clear under the floor and when it was as high as the lower brace inside the tank it was better than one-third full.

Never having run an engine before with a cylindrical or Vanderbilt tank, I had failed to realize that a foot and half of water measured at the center on an upgrade was very little and I should have left my train and run light for the Lawndale water plug. Although I felt sure I had showed good sense in pulling the fire and had possibly saved the lives of the fireman, head brakemen, and myself, I knew I was in for grilling.

I was really surprised that night when my phone jangled and the roundhouse told me to report to Revelle W. Brown the next morning at nine. Revelle Brown was then vice president and general manager of the Jersey Central, and I thought, *They're sure going high enough.* I had expected an investigation but not by the vice president.

Next morning I found the general manager's office in a wing leading off the second floor of the ferry concourse. Walking through a big room flanked by three stenographers on each side, I reported to a gray-haired man who looked like a G.M. but proved to be only the chief clerk. Fifteen minutes passed before I was ushered into the presence of Mr. Brown, who had spent many years with the Baltimore & Ohio Railroad but only a short time with the Jersey Central.

After asking me to sit down, he went right to the point. "Why did you run out of water on Number 4484 and why did you pull the fire? I can't understand the engineers on this road. You think you have enough water, so you don't bother to look."

I said it wasn't a question of bothering to look.

"It may *seem* to you like laziness that an engineer doesn't climb up on top of the tank to look at the water while running at night but the fact is that more than one man on this road has been struck by an overhead bridge and killed in doing just that."

Actually, we had no safer way to check our water supply and I was glad to get in that dig.

Mr. Brown asked, "Don't our engines have petcocks for that purpose?"

"There is one petcock about eight inches from the bottom of the tank," I said, "and you have to get down on the ground to open it."

THEN he wanted to know why, after getting to the Lawndale water plug, I had knocked out the fire instead of putting the injector on.

"Because the engine had gone so long without water," I told him, and explained how I had set the brakes, placed the reverse lever in the center, and opened the throttle wide without finding any trace of water, nothing but blue steam at the lower gage cock and the engine stinking hot. I knew that B&O locomotives didn't have soft plugs like those on the Jersey Central (All CNJ Camelbacks had one soft plug; Pacifics and Mikados had two.) I said I thought the boiler was about to blow up.

Then he said, "With a big engine the soft plugs could let go and if the engine was stoker-fired and the fireman wasn't looking in the firebox all the time he would never know it. And what made you think the boiler would blow up if you put the injector on?"

I looked at him in surprise, thinking he was joking, but I saw no smile and answered: "Ever since I've been around a railroad I've been warned never to put an injector on if the engine is hot and no water can be found in the boiler, as it would certainly cause something to let go."

He shook his head. "Boilers don't blow up from having water put in them. They blow up if they're so overheated

that the tensile strength of the steel is like putty. When that point is reached the boiler will let go whether you put on the injector or not. In fact, by putting it on you may even prevent a blowup. But don't think I'm encouraging you to take chances with low water, as you might as well play with TNT . . . You say you placed the engine on center, applied the brakes, and opened the throttle wide. Why?"

My answer came quickly.

"Because opening the throttle wide tends to raise the water level in the boiler and I hoped I could find a trace of it in the bottom gage cock."

"Exactly." The G.M. lifted his voice. "But you didn't know where the level was when you did that?"

"No, I was trying to find it."

He seemed to think he had me then. "Suppose the water was below the level of the crown sheet and by doing that stunt you actually raised it over the top, wouldn't that have been the same as putting water in with the injector?"

"No," I blurted out, "that would have been hot water, not cold."

"But you're not putting cold water in a boiler with an injector!" he said.

I tried to correct myself. "I know the water is not cold and the steam driving the injector heats it, but it isn't anywhere as hot as the water in the boiler."

FOR TWO solid hours Mr. Brown kept grilling me and telling of his many accomplishments, how much he knew about boilers—he'd been a locomotive engineer, roundhouse foreman, boiler inspector, and superintendent of motive power—and how little I knew. He said that due to my carelessness the railroad could lose thousands or dollars.

"When you deal with a grocery store and get stuck with inferior merchandise, you *might* go back and complain," he said, "but a lot of people just quietly take their business to another store. Your train had two cars from a new shipper, and due to your fine reasoning his cars missed a B&O connection and had to lay over for 24 hours. This shipper called and told us what he thought of our service; but we don't know how many other shippers will just take their business elsewhere, without even complaining."

No answer to that, of course; I could only sit there and listen.

"Mr. Lohr, perhaps you would like to know how it is that one man commits a trivial offense and is discharged, while another man does something much more serious but is kept on. Well, often the first man is one who is always getting in trouble and has become a liability, while the other seems like a man who will learn. I feel that *you* will profit by your mistakes."

He had been glancing at a paper on his desk, which he finally picked up, saying: "Perhaps in fairness to you I should read the last paragraph of this letter from Mr. Falck, vice president and general manager of the Reading:

" 'I am informed by our chief dispatcher that this engineer is a competent man and his past performance handling B&O freights over the Reading has been highly satisfactory. His trouble on this particular night was due no doubt to the fact that he was running an engine with which he was not familiar.' "

Pounding the desk, Mr. Brown ended with: "It was your business to familarize yourself with that engine."

A FEW days later when I got in off a run, the crew dispatcher said: "You're out of service, Ed, and Higgs wants to see you." He handed me a standard form saying I was suspended for five days, effective at once, for running out of water and pulling fire on

Photo by the late Granville Thomas

Long ago on the Jersey Central: Way freight pulled by Camelback No. 1749 crosses Maurice River en route to Vineland, N. J.

Baltimore & Ohio engine No. 4484.

As soon as I had washed up I went to see George Higgs, our road foreman of engines at Communipaw, who told me:

"I didn't do this to you. It came from the vice president and general manager."

"I didn't think you did, George," I said.

"What's five days, anyhow, as long as you've got two arms, two legs, and your eyes? If you'd tried to put water in that engine maybe you wouldn't be here now," he said, "and if I'd been with you that night and you were going to put water in her, I'd have said, 'O.K., Ed, if that's what you want, but wait till I get half a mile down the track.' "

I told him that Mr. Brown had criticized me for pulling the fire on the 4484 and what he had said about soft plugs.

"If I'm ever super of motive power on a road that doesn't use soft plugs," George said, "my first order will be to install them."

He asked if I'd ever seen a soft plug out of a boiler and I said I hadn't.

Then he phoned Daly, chief boilermaker, to bring one over. Made of brass or bronze with a center of babbitt metal, the plug was screwed into the crownsheet flush on the fire side and sticking up half an inch above the crownsheet. As long as it was covered with water the plug held, but when the level got down to half an inch above the crownsheet the center would melt and the steam would blow down into he firebox, warning the fireman of trouble and sometimes even dousing the fire.

George and Daly and I all agreed that the results spoke for themselves. I have known of several locos blowing up on the B&O, Reading, and Lehigh Valley, and have heard of soft plugs letting go on the Jersey Central, but there was no boiler explosion on the CNJ during my 46½ years of service.

ABOUT two weeks after I had served my five days plus a couple more and had gone back to work, the crew dispatcher told me again that Higgs wanted to see me.

"I've had no peace of mind since I talked to you," he said, "because I was all wrong and Brown was right. I wrote to the Bureau of Explosives in Washington to ask why boilers blow up and they wrote back that boilers don't explode on account of putting in water but because the tensile strength of the staybolts has become as weak as putty. When that happens the boiler will let go, whether you put in water or not.

"If you go down to the roundhouse today to get on an engine and find a fire in the firebox, no water in the bottom gage cock, and the pop valve up, don't try to dump the fire, because you may not have time. Reach up for both injectors (our Camelbacks had Hancock composite type injectors, operating handles together, both injectors working in one body) and get them on quick. If you're afraid to do that, just call me."

His about-face left me dumbfounded, and I asked, "George, did you also change your opinion about soft plugs?"

He admitted that he had, to a certain extent, and tried to explain by saying: "More than one poor devil has gotten in trouble when he still had half an inch of water over his crownsheet, whereas if there were no soft plugs he might have made the next water stop without anyone being the wiser."

I walked out of the office in a fog and over to Communipaw station to get a local down to the ferry. Pretty soon Oscar Forner, our assistant road foreman of engines, sat down beside me and I told him what Brown and Higgs had said.

"Maybe they are right," he commented thoughtfully, "but if they keep talking like that I'm afraid it will cost some poor guy his life."

I HOPED I'd never again find myself faced with that kind of dilemma but eleven years later I was at the throttle of our 860 when she began to run dry. This time there was no water to put in, so I had no choice but to dump the fire, and no one criticised me for it.

I often handled Reading 4-8-4's on Baltimore & Ohio fast freights and was grateful for the indicator which showed—or so I thought—just how much water remained in the tank by means of a dial like an air gage, a full tank being seven feet.

Since these fine 2100's had 19,000-gallon tanks, I ran many of them through from Jersey City to East Side without taking water; but one day the big girl went bone dry just as we were rolling into the East Side Yard, Philadelphia, with the gage still showing three-fourths of a foot.

I stopped at Lawndale and took on a couple of feet of water just to make sure. When we got 21,000-gallon tanks on some of the Mikados ("Atlantic Ocean tanks," we called them) we were finally able to make the entire run safely.

As you couldn't look down the manholes of these high tenders, some genius thought up the idea of putting a water indicator on the engineer's front corner of the tender, so made that when you raised a plunger the water from the tank would rise in an upright pipe perforated with small holes. Since the water sought its own level, drops would trickle out through the holes up as high as the water in the tank.

You might think that this simple device would solve our water-level problems, but often in winter the cutting winds froze the plunger fast. The fact is that during the nearly half a century I spent on the engineer's side they never did find a completely reliable water gage, so maybe I was luckier than I realized at the time. ●

CNJ's old Bronx freight terminal in New York looks like locomotive roundhouse.

Safety belts have been installed in the cupolas of all steel cabooses on the Duluth, Missabe & Iron Range system.
Missabe Iron Ranger

1 *Since airplanes and automobiles need safety seat-belts, why don't railroads use them in cabooses?*

One road does. The Duluth, Missabe & Iron Range began it in 1945. This adoption of seat-belts was partly responsible for DM&IR's receipt in 1963 of both the E. H. Harriman Award and National Safety Council's Award of Honor for public safety activities.

2 *Where did the first railway station in Washington, D.C., stand?*

A boarding house located at Pennsylvania Avenue and 2nd Street, northwest corner, was bought by the Baltimore & Ohio and converted to a station in the summer of 1835. We don't know when it was built.

3 *List America's 25 longest railroads and the mileage each one operates.*

(1) Santa Fe, 12,970 miles, (2) Southern Pacific, 11,782, (3) Missouri Pacific, 11,446, (4) Milwaukee Road, 10,540, (5) Chicago & North Western, 10,474, (6) New York Central, 9,974, (7) Pennsylvania, 9,757, (8) Union Pacific, 9,705, (9) Burlington, 8,547, (10) Great Northern, 8,263, (11) Rock Island, 7,842, (12) Northern Pacific, 6,795, (13) Illinois Central, 6,460 (14) Southern, 6,274, (15) Baltimore & Ohio, 5,870, (16) Louisville & Nashville, 5,656, (17) Atlantic Coast Line, 5,521, (18) Chesapeake & Ohio, 5,145, (19) Soo, 4,673, (20) Frisco, 4,544, (21) Seaboard Air Line, 4,124, (22) Erie-Lackawanna, 3,143, (23) Katy, 2,871, (24) Gulf, Mobile & Ohio, 2,746, and (25) Norfolk & Western, 2,746.

The Association of American Railroads supplied these figures as of Dec. 31, 1962. Although the C&O-B&O merger gives the enlarged "Chessie" system enough mileage to put it in fourth place, the two roads still have separate book-keeping records.

ASK BARBARA: **Railroad questions are answered here by our research expert—as many as space permits. Top priority is given to subjects of general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.**

The Pennsylvania topped all American roads in both net investment and operating revenue in 1962, followed by the Southern Pacific, New York Central, Santa Fe, and Union Pacific. But if you use net railway operating income for that year as a yardstick, the Norfolk & Western, Santa Fe, Southern Pacific, Chesapeake & Ohio, and Union Pacific in that order head the list, with the Pennsy dropped to 13th place.

If you form a priority list based on net income for 1962, the leaders are UP, Santa Fe, N&W, SP, and C&O, with the proud Pennsy way down in the cellar, 95th place! Take ton-miles of freight for the same year and you find the SP is champion, with Pennsy, Santa Fe, UP, and NYC trailing.

But if passenger-miles is your criterion, the top five in the batting average for '62 are Pennsy, Santa Fe, Long Island, NYC, and UP. The Pennsy also had, alas! the year's heaviest passenger-service deficit, followed unhappily by the Santa Fe, UP, SP, and NP.

As for employees at the year's end, the Pennsy again was first, with 66,515 hired hands, while NYC had 51,110, the SP 48,967, Santa Fe 44,976, and UP 34,861. Another method of comparing the sizes of railroads is the number of locomotives owned or leased. By this test, on Dec. 31, 1962, the Pennsy led with 2,656, followed by NYC with 2030; the SP, 2020; Santa Fe, 1,855, and UP, 1,397.

Still another measurement is the number of freight cars owned or leased. The top five were Pennsy, 140,835; New York Central, 94,115; C&O, 88,123; Santa Fe, 84,439, and SP, 77,738. As for passenger cars owned or leased in '62, here is the line-up: Pennsy, 3,546; NYC, 2,905; Santa Fe, 1,235; Long Island, 1,193; Erie-Lackawanna, 1,066.

4 *What is the "Black Bear Route"?*

The Algoma Central, whose emblem pictures a black bear. It runs between Hearst and Sault Ste. Marie, Ontario. You can read a history of this line in Sept. '63 issue of *Newsletter,* Upper Canada Railway Society, Box 122, Terminal A, Toronto, Ont., Canada.

5 *Recently I saw an eastbound Jersey Central freight train stop near my home in Plainfield, N.J. One of its cars was lettered "National Bureau of Stanards." What is NBS?*

INFORMATION BOOTH

The Bureau of Standards of Weights and Measures is a unit of the U.S. Department of Commerce, Washington, D.C. It sets standards for the entire country.

6 *(a) How did the Pere Marquette gets its name? (b) How many railroads were merged into it?*

(a) It came from Father (*Pere*) Jacques Marquette, noted French explorer, who is buried on the shore of Lake Michigan at Ludington, the home port for Chesapeake & Ohio's fleet of 7 trainferries. A tall stone edifice topped by a cross marking the spot is visible for many miles out on the lake.

(b) The PM Railroad comprised 93 small roads, mostly logging lines. Today it is part of the C&O. It is the C&O's Northern Region, serving the highly industrialized State of Michigan, including the automobile industry. The trainferry fleet provides a time-saving route for freight moving from the Northwest into the East.

7 *Why don't railroads wake up to the fact that their shippers are best served by short, frequent hotshots rather than long, infrequent ones?*

It is true that most of the big roads wait until they can assemble enough carloads of freight to make a long train before scheduling a fast merchandise run. The reason is sheer enconomy. But some lines are waking up, according to Tom Shedd, editor of *Modern Railroads*, who explains:

Modern locomotives can haul heavy, long trains. If you run fewer trains you need fewer train crews. And, since there are fewer trains on the road, you need less mainline trackage. Thus, the trend to long trains has been accompanied by the elimination of much second, third and fourth main track. And sidings have been lengthened on singletrack roads.

But now many railroads are taking a second look at this policy of running the fewest and the longest trains possible. Doing this usually means that cars must be collected at terminals until enough are on hand to make a full train. Repeated at each terminal en route, this procedure can add days to freight transit time.

Furthermore, ultra-long trains—125, 150, 200 cars—are more subject to delays en route due to equipment failure; they are harder to operate without damage to lading.

Today, railroad shippers demand fast, reliable and damage-free service. And, as we now know, the customer has the ultimate say-so in this railroad business.

In retrospect, it would seem that the policy of running a minimum number of exremely long trains is really a relic of monopoly-type railroading. Essentially it provides a service that suits *railroad* convenience, with little regard for customer convenience or desires. Railroads could get away with this when shippers had no choice. It won't work anymore. How much of the traffic that has left the rails is gone because of this past failure to think in terms of the customer?

The growing interest in better equipment utilization also ties in with the "shorter train" concept. Conceivably, the savings through faster turnaround of locomotives and cars could offset part of the cost of running more trains.

Of course, an obvious problem is the cost of crews. Here is where modernization of the work rules can pay big dividends. And would it not be possible to offer the operating unions a plan for running more trains with fewer men per train—so that the total number of jobs would be the same?

Sure, the unions would fight such a plan; because it would mean upsetting the status quo. But with no job losses, their arguments wouldn't have much force. And besides, haven't the unions been saying all along that the railroads should run more frequent, shorter trains?

Obviously, very long trains will continue to be operated. They still have their place—particularly in the mass hauling of bulk commodities. But there is a clear need for more frequent, faster trains operating on precision schedules. We'll be seeing more of these high-speed freight trains with 50, 75 or 100 cars.

8 *What was the first message sent by telegraph?*

Contrary to general belief, it was not "What hath God wrought?" nor did Samuel Finley Breese Morse, inventor of the telegraph, send it. Actually, it was tapped out one day in 1843 in a small room in the Capitol at Washington, D.C., by an anonymous member of the Congressional committee debating Morse's proposal to string a telegraph line from Baltimore to Washington.

The inventor, who wanted to end the discussion and at the same time demonstrate his new device had a wire strung from the committee room to the top of the Capitol dome. A committee man who was familiar with the telegraph code and opposed to President Tyler tried it out by sending these words, "Tyler deserves to be hanged." This startling message was received and noted by the man at the other end of the line. Almost immediately afterwards, however, Morse himself tapped out the now-famous "What hath God wrought?"

An official report ignored the original telegram, which has never found its way into any school history book that we know of. Trains were dispatched by telegraph for the first time Sept. 22, 1851, on the New York & Erie (now Erie-Lackawanna).

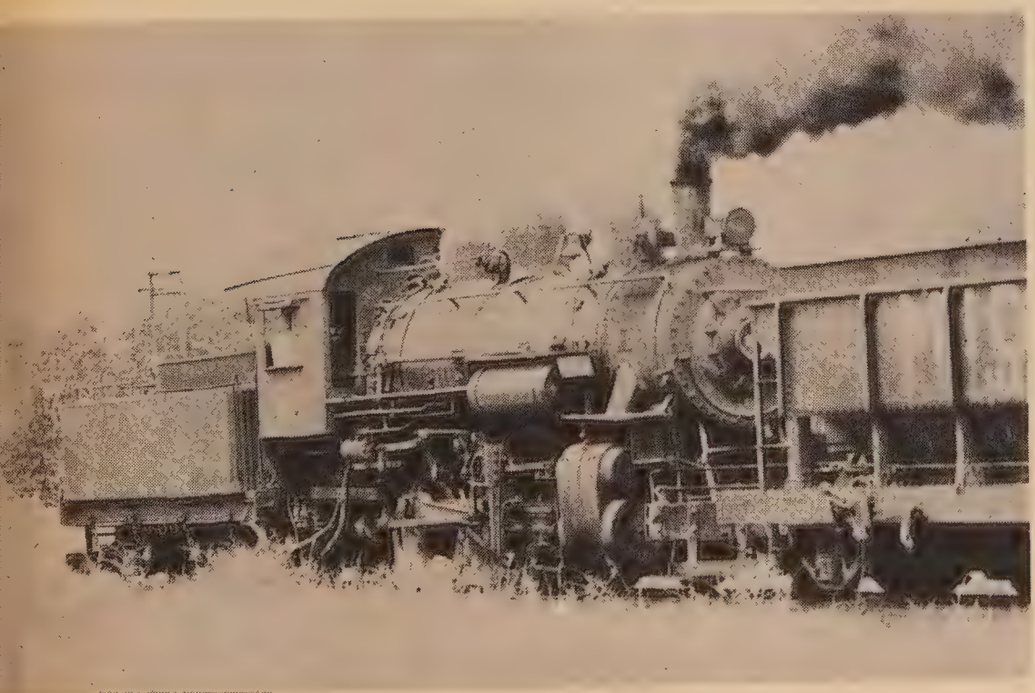
9 *Which road has the world's shortest passenger run?*

Undoubtedly the Harbor Springs & Harbour Inn Line at Harbor Springs, Mich., whose engine, No. 102, moves forward one foot as she delivers her passengers at the whistle stop in front of the Harbour Inn, a resort hotel on Traverse Bay, Lake Michigan. No. 102 is an old steam switcher running on a brief stretch of track for the benefit of patrons of the inn owned by Nicholas Bicking. She pulls a wooden-bodied coach and a wooden caboose, restored to their original condition and used as a snack bar and antique shop. The train actually runs—one foot each way!

10 *Do you have the words of an old poem, "The Night Express"?*

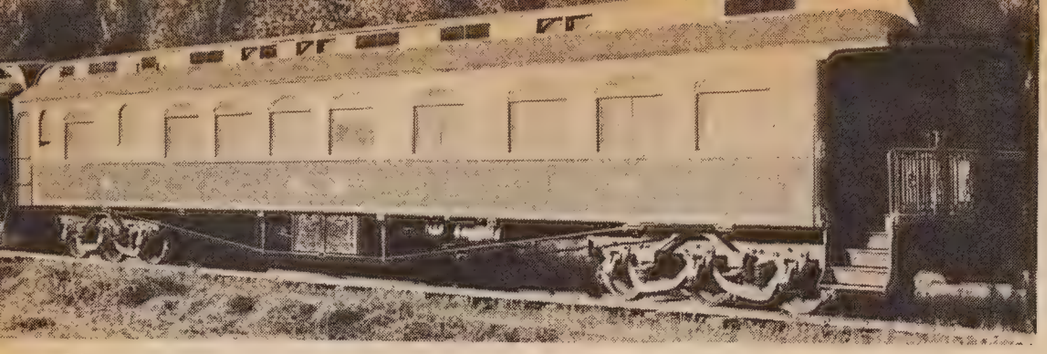
Yes, written by Willa S. Cather.

From out the mist-clad meadows, along the river shore,
The night express train whistles with eye of fire before.
A trail of smoke behind her enclouds the rising moon
That gilds the sighing poplars and floods the wide lagoon.
Through yellow fields of harvest and waving fields of corn
The night express train rumbles with whistle low and lorn.
The silent village harkens the sound it knows so well,



Six ex-Minneapolis & St. Louis 0-6-0's switch coal cars daily for Midland Electric Coal Co. near Farmington, Ill. We see No. 80 wheeling a string of empty hoppers while No. 84 backs a cut of loaded cars. These engines and some 0-8-0's at Northwestern Steel & Wire are the only steamers in daily service in Illinois.

Ron Ziel, 185 Hall St., Brooklyn, N.Y.



Observation car Proteus, built 1904 for the Wheeling & Lake Erie and restored by American Railroad Equipment Association, Box 75, Cherokee, N.C. This association supplies railroad equipment, any size, any gage, by lease or sale to support its museum activities. (Details in the Feb. '63 issue of *Railroad Magazine*, page 56.)

And boys wait on the siding to hear the engine bell.
While lads who used to loiter with wistful steps and slow,
Await tonight a comrade who comes, but will not go.
The train that brings to mothers the news of sons who roam
Shoots red from out the marshes to bring a wanderer home.

With restless heart of boyhood we watched that headlight when
The whistle seemed to call us to dare the world of men;
To leave the plow and herd-whip for lads with hearts of clay,
And while our blood was leaping be up and far away
To find the great world somewhere, to wander wide and see
If men of coast or mountain were better men than we.
We heard the hoarse throat whistle, we heard the engine bell,
We saw the red eye blazing, we knew the hot heart well,
But little could we reckon, gay-hearted boys at play,
The horse that took us out to men would bring us home one day.
That took us out at morning, with shining wheels ahum
Would bring us home at evening, when we are glad to come.

Ah! let my fight be fiercer, the little time before
They bring me still and weary along the river shore.
Then may the wheels turn swiftly behind the eye of fire,
And may the bell ring gaily that brings me my desire.
The boys I used to watch with will all be there to see,
When I come home to rest me in the ground that nurtured me.
To earth I digged in boyhood, through fields I used to keep,
The lads who wrought beside me shall bear me home to sleep.
From out the mist-clad marshes, along the river shore,
With trail of smoke behind me and eye of fire before;
And youths will watch me with burning to seek the world of men,
And thrill to hear the whistle that brings me home again.

11 *How many special trains and buses were used for the Civil Rights march on Washington?*

Washington Terminal Co. reports that 20 special trains, consisting of 319 cars and carrying 18,000 passengers, rolled into Union Station last August 28th for the massive demonstration. About 7,000 other marchers used regularly scheduled trains. It is estimated that a total of 25,000 participants arrived at Union Station by rail that morning.

The Police Department unofficially logged more than 1500 chartered buses arriving for the event, parking in the area and leaving later that day. Bus capacities ranged from 37 to 50 passengers. Number of passengers on chartered buses was estimated at 63,000. Many chartered buses came from distant places such as Portland, Ore; Miami, Fla.; Houston, Tex; Kansas City, and other Midwestern points.

In addition, uncounted multitudes rode to Washington that day in regular buses, private automobiles, and airplanes. It was history's greatest traffic movement for any single day.

12 *Where can I get data on the salaries paid to railroad presidents?*

From the Interstate Commerce Commission's Bureau of Transportation Economic's and Statistics, Washington, D.C. This bureau has released figures on annual salaries paid to rail presidents at the close of 1962, plus in some cases other compensation. The Union Pacific's big chief, with a total of $146,600, tops the list, followed closely by presidents of the Santa Fe, Southern, and Southern Pacific. Here are figures for some of the major railroads:

Atlantic Coast Line, $89250 plus $4,800
Baltimore & Ohio, $75,000
Bessemer & Lake Erie, $75,000
Boston & Maine, $62,500 plus $1,078
Burlington, $95,000
Central of Georgia president and general manager, $38,500 plus $1,570
Chesapeake & Ohio, $134,736 plus $2,400
Chicago & Eastern Illinois, $60,000
Chicago & North Western, $70,000
Delaware & Hudson chairman, chief executive officer, director, $90,000 plus $1,400
Elgin, Joliet & Eastern, $72,000 plus $150
Erie-Lackawanna president and chief executive officer, $81,000
Great Northern, $120,000 plus $1,200
Illinois Central president and chairman of executive committee, $100,000 plus $6,990
Louisville & Nashville, $89,250 plus $6,640
Milwaukee Road, $75,000 plus $4,900
Missouri Pacific, $110,000 plus $3,200
New York Central, $100,000 plus $3,300
Nickel Plate, $90,000 plus $2,910
Norfolk & Western, $110,000 plus $7,050
Northern Pacific, $120,000 plus $950
Pennsylvania, $90,000 plus $5,210
Reading Company, $75,000
Rock Island, $70,000 plus $1,100
St. Louis-San Francisco, $75,000
Santa Fe and affiliated companies, president and chief executive officer, $140,000 plus $2,200
Seaboard Air Line, $90,000 plus $1,390
Southern Pacific, $140,000
Southern, $135,000 plus $5,700
Union Pacific and leased lines, $145,000 plus $1,600
Wabash, $75,840 plus $3,325
Western Maryland, $78,000 plus $2,100

November 5, 1961. The 5629, which railfan Dick Jansen bought from the Grand Trunk Western, is making her first run under his ownership, on the Baltimore & Ohio Chicago Terminal Railroad. He equipped her with new fixtures, including a bell and a headlight from an Illinois Central engine, 2500 class Mountain type. Larry Kostka, 1831 S. Kenilworth Ave., Berwyn, Illinois

Running Extra

A few changes in our December list of American railroads owning steam engines are offered by Michael Varney, 2968 East A, Torrington, Wyo.: "UP 4004 is now on display in Holliday Park, Cheyenne, Wyo., and only 3985, 4023 and 8444 remain in the Cheyenne roundhouse. Great Western has sold its Nos. 51 and 60, while C&S 4994, ex CB&Q, is being stripped of parts for No. 4960." Mike wants a list of the numbers of UP streamers scrapped in Cheyenne since Aug. '60. "If some of the many stored there were sent away for scrap," he writes, "could you supply their numbers and dates?"

"You kinda goofed in Feb. *Information Booth,* item 4," writes Western Pacific engineer Bill Pennington, Box 478. Portola, Calif. "If an engine with a pilot on both ends *pulls* cars to a terminus without a turntable or wye, the trailing-end pilot serves no purpose.

"If the said engine were to *push* those cars back to the original terminus, the pilot which trailed on the outgoing trip would be up against the cars if it is pushing and would still serve no purpose.

"If the engines were to overstop a stopping point and back up, the original leading pilot would be in the direction of movement. So why a pilot on both ends? It seems the car should have a trailing pilot, which would be a leading one on the return trip.

"Actually, the engine would 'run around' the train, on the return movement, and would need a pilot on the other end for this purpose, as it would be ahead of the cars.

"Footboards usually serve as pilots on most GP diesels and are on both ends. One Western Pacific diesel, No. 706, a GP-7, used exclusively on the Reno branch in winter, has a pilot plow on each end. Reno has no turntable or wye, but the engine does not push the cars back to Portola; it just runs around them and pulls them. Other GP-7's here have a pilot plow on one head end, but as there is a 'balloon track' to turn engines here, a wye at Keddie, and a turntable at Oroville, they can always be turned so the plow will lead. Besides, two GP-7's can't be coupled plow to plow in such a way that one end has no pilot plow.

"Your statement, 'It was common for a switcher to have two pilots and two headlights': I have worked on the WP for 27 years and have yet to see a switch engine *without* two headlights, unless a road engine was being used in switching. While some FT's and F-7's have headlights most do not. All GP's I've ever seen do have two."

Bill, you seem to be thinking only of diesels; we've seen old pictures of *steam* switchers with only one headlight.

Thomas Lawson, Jr., 102 La Fayette, Boaz, Ala., sends a list of steam locos under ICC inspection disposed of since March 1, 1963: Angelina & Neches River 208, sold to Trinity Valley Railfan Club; Bevier & Southern 109, sold to F. Nelson Blount; B&S 112, now displayed at Bevier, Mo.; Birmingham & Southeastern 200, sold to Steven P. Bogan for use at Empire State Ry. Museum; Cliffiside 110, sold to Harry T. Stewart for use on Southern, Echo Lake & Swamp Rabbit Branch; Dardanelle & Russellville 9, sold to Mid-Continent Ry. Museum; Hampton & Branchville 32, sold to Maryland & Penna.; Kentucky & Tenn. 11, sold to U.S. Govt., Aberdeen Proving Grounds, and Woodward Iron Co. 38, donated to Heart of Dixie RR. Club for permanent display.

Tom Lawson says ex-N&W steamer No. 11, Class G, is stored awaiting display by Olin-Mathieson Chemical Corp. at Saltville, Va. Was last operated in late 1960. "She may already be on display but I don't think so."

Bob Inghram, Box 194, Chesapeake, O., wants info, on C. C. Lewis, who built railroads in W. Va. about 60 years ago.

Regarding the two ex-T&NO steamers in use on a sand and gravel line near Franklinton, La. (Oct. issue), this letter comes from C. W. Bartholomai, 3148 Lenox Rd., N.E., Atlanta 5, Ga.: "When I was there last May I saw 4-6-0 No. 72 (Baldwin 14350 extra order, Jan. '28) running. I also saw SP 0-6-0, old and very decrepit, with number 842 on her cab and tender light but 47 on her headlamp, and a deckless 2-8-2 (Alco, Brooks Works 63188, Nov. '21), and half buried in the weeds I discovered two 0-6-0's, Nos. 210 and 60, ex-IC and ex-GM&O respectively. The 72 is a veteran of GM&N, GM&O, and Gaylord Container. No. 842 is ex-T&NO 156 and 842. Another steamer owned by Green Bros. Gravel Co. is 124 (2-8-2), originally Mississippi Central 124."

"Why do nearly all of the railbooks published recently in this country deal with the West?" asks Bob Richardson, Colorado Railroad Museum, P.O. Box 641, Golden, Colo. (Bob will be No. 20 in our series of *Interesting Railfans.*)

Avery F. Von Blon, Box 6422 BU Station, Waco Texas, wants biographical info, on Maj. D. W. Washburn, constructure engineer for FW&DC, Katy, and T&P.

"I have an antique railroad padlock, the keyhole cover and key of which are initialed B&M, and I want to know what it was probably used for, and where," writes Bill Burton, 710 Reed St. Sedro-Woolley, Wash.

Answering Barry Young's question about the largest number of pusher locomotives ever used on one train, Ron Morse, 893 Linda Vista, Banning, Calif., writes: "I have seen SP ore trains between Indio and Beaumont, Calif., each with as many as 22 locos pushing and pulling up San Gorgiono Pass. The rear helpers and often the middle ones are cut off at Beaumont. Each train might have 6 to 8 locos in front, 8 to 10 in the middle, and 4 to 6 at the rear.

"A familiar sight, too, are yard switchers running dead to and from shops behind lead units in freights."

Gary Gorman wants info. on an old narrow-gage Shay left in the woods near Aptos, Calif., after a small logging railroad there was scrapped. "The line ran from a mill at Loma Prieta into camps in the Santa Cruz Mts. About a year ago a hunter reported she was in good shape but surrounded by dense underbrush. We want to locate and restore her for use at Roaring Camp, Felton, Calif."

Who can give a short history of the Fox Patent Truck to Dan Foley, 3801 14th St., S. Arlington, Va.? "I've seen this type used only on the Boston & Maine and its subsidiaries," he writes. "Were any Fox trucks built for narrow-gage equipment?"

Info. and pix are wanted by Jan Gleysteen, 615 Walnut Ave., Scottdale, Pa., 15683, for use in a book he is writing on the story of the American-type locomotive. Jan is approaching the 4-4-0 from the viewpoint of historical development, design, historic firsts, speed records, train wrecks, where 4-4-0's are now on display or available to ride behind, the 4-4-0 in models, in art, and so on. (Feb. '57 *Railroad Magazine* had an article on 4-4-0's by H. L. Kelso.)

Queries from J. A. Steel, 321 Mifflin St., Huntington, Pa.: "Who can supply a brief history of the Allegheny & Pittsburgh, affectionately called the 'Alleypopper'? Was a head-on train collision staged on that road in about 1912 for a motion picture?"

The Monadnock Railroad is located at North Walpole, N.H., not Mass., as our December issue stated. This correction comes from Charles Scott, 22 Garrison Ave, Dublin, N.H., who points out that the two North Walpoles are on opposite sides of the Connecticut River. "The engines, including No. 15," he writes, "are owned by F. Nelson Blount, who lives in my town. No. 15 came from Rahway Valley line in New Jersey. Mr. Blount uses her to haul a train between North Walpole, N.H., and Westmoreland, N.H., during mild-weather season. The Boston & Maine owns this track and uses it for local freight." ●

Interesting Railfans No. 19

FRANK DONOVAN

"I'll never forget that car," says Frank P. Donovan, Jr., referring to trolley he chartered from Twin City Rapid Transit Co. for his wedding party in 1944.
Stephen D. Maguire

LIKE Dave Morgan, railfan No. 19 started his career as a railroad author by doing features for our magazine, later joining the editorial staff of *Trains*. The two men have much in common. But Dave's first two magazine articles dealt with steam power, Frank's first two with trolley cars.

In fact, when Frank married a pert and pretty University of Minnesota co-ed named Janice F. Goerner in Minneapolis on November 15, 1944, he hired a trolley of Twin City Rapid Transit Company to take the wedding party of about seventy—mostly University students and faculty members—to a Friends' meeting-house for the simple Quaker ceremony, Frank being a Quaker.

"I'll never forget that car," he says. "It was a big yellow double-trucker with Tuscan-red roof and dark green underframe, air heated, and coal-fired at the end of a run. Very wide, too. About a foot wider than most of the trolleys in this country."

Upon boarding it near the University stadium, Frank paid the motorman for the charter; and the passengers in a jolly mood passed a hat for a gift to the smiling couple and then sang *The Trolley Song* and folk tunes. Afterward, as stated in his article that begins on page 13, he and Jan took a Soo Line steam train for a honeymoon in a remote Minnesota lakeside village.

No. 19 was born October 4, 1909, in Wayne, Pa., on the Pennsy main line near Philadelphia, the son of an advertising man. His mother was distantly related to President McKinley. While attending college, first at Maryville, Tenn., and then in Washington, D.C., Frank won two essay contests (not on railroad subjects), which gave him the initial stimulus to become a professional writer. This impulse was strengthened by his early jobs as public relations clerk, later research assistant, for the Association of American Railroads at Washington and trucker-clerk on the Pacific Electric Railway, handling Railway Express Agency baggage in Los Angeles.

In 1937 he turned to journalism with a unique query. He would ride a zigzag chain of high-speed interurbans from Cleveland to St. Louis, he said, and write an article about the trip for *Railroad Magazine*; and we gladly gave him the assignment.

"I traveled all the way by electric car, 14 cars," he recalls, "except for two short breaks on steam trains. In all I covered 1227 miles, 1113 of them by trolley for $19.64 in fares and 164 by train for $3.05. The journey took seven days, due to poor connections, but only 38½ hours of actual running time."

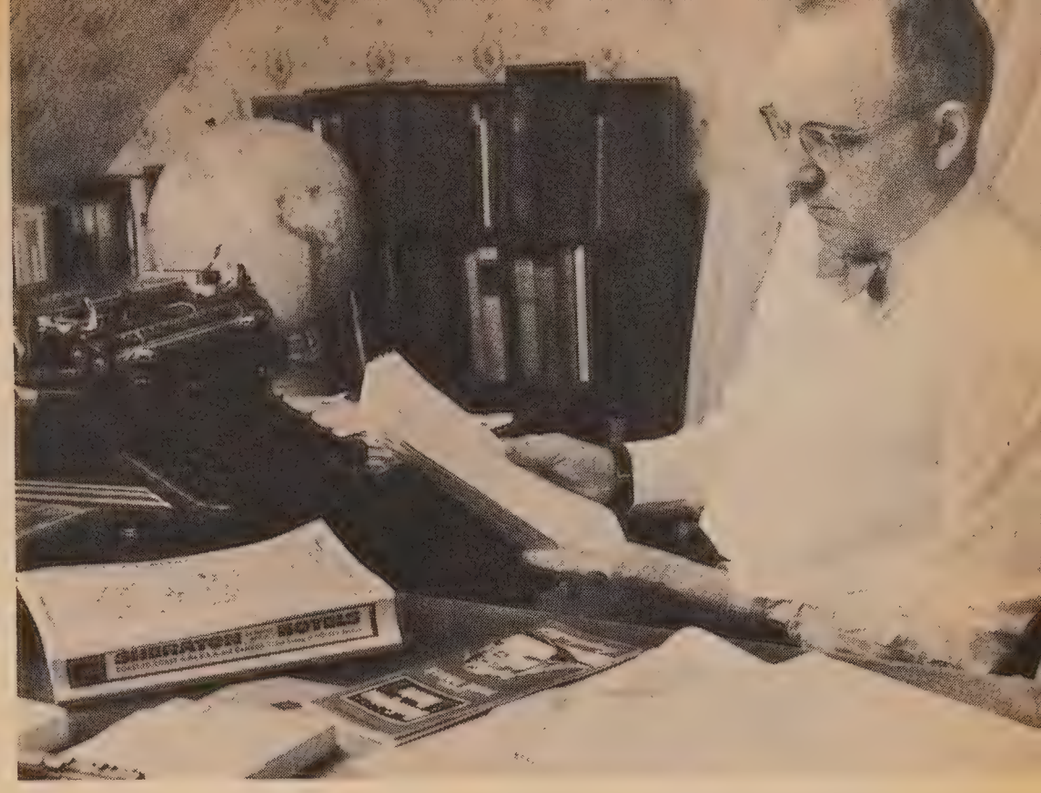
Railroad printed his detailed story that December under a well-rounded title, "1000 Miles by Trolley," illustrated with ten photographs and a map. It opened with these words:

"From Cleveland to St. Louis by trolley! In these days it sounds almost incredible, doesn't it? But I made the trip a few weeks ago, just to prove it could be done; and now I'm convinced that the modern interurban car no more resembles her old-fashioned ancestor than the present-day steam locomotive resembles the old Forney type."

This piece scored a hit with our readers. It prompted another fan to ride over 600 miles on the New York subway-elevated system without covering any stretch of track twice—which must have been a long, tedious ordeal! —and write it up for *Railroad Magazine*. But shortly after "1000 Miles by Trolley" came out, most of the lines which Frank Pierce Donovan had ridden folded up. While gathering material for his next piece, "The Real Toonerville Trolley" (*Railroad*, Feb. '38), the "Toonerville" being a creation of cartoonist Fontaine Fox, Frank had a sad experience:

"I interviewed Thomas O'Connell, senile ex-president of the old Phoenixville, Valley Forge & Strafford Electric Railway. That line, over which a 'Toonerville' car once ran for a movie production, had long since been abandoned. Mr. O'Connell lived in a small room of a garage which used to be his car barn. His health was failing fast and he could barely talk. I think he died a few weeks afterward."

M&StL engine 619: illustration in Donovan's book, *Mileposts on the Prairie.*



The Donovans: Frank, Jan, and Bob. (Right) Frank at work in his study.

Another of Frank's unusual *Railroad Magazine* projects, an alltime survey of railroad fiction in the English language, was expanded later into his first book, *The Railroad in Literature*, embracing verse, essays, etc., as well as fiction and published by The Railway & Locomotive Historical Society, Inc., to which he belongs. Now out of print, the paperbacked volume is much in demand as a collector's item. His second book, the hard-cover *Headlights and Markers*, with Robert S. Henry collaborating, is an anthology of railroad short stories.

Then came *Mileposts on the Prairie*, a history of the Minneapolis & St. Louis (now in the Chicago & North Western system), which he wrote after he'd had a lot of fun traversing the 1400-mile line in coaches, engine cabs, section cars, and cabooses. His third railbook, *Gateway to the Northwest*, also stiffly bound, tells the Minnesota Transfer story. Among other books that have rolled off the Donovan production line are *The Manchester & Oneida Railway* (an Iowa shortline) and a popular biography of the late Harry Bedwell, whom many readers consider the world's top rail-fiction writer.

Frank's by-line also has appeared in many magazines, including 21 times in *Railroad* and including a long list of general periodicals. After writing five articles for *Trains* he got a job there as research editor, later associate editor. *Trains*' publisher Al Kalmbach tells us: "Frank is a very careful, fastidious worker with ability to make the things he writes about come to life. His best *Trains* article, in my opinion, was 'Branchline Odyssey,' covering Delmarva Peninsula railroads."

Frank caricatured by Morris Cowdry.

Frank has always been adventurous. One Friday, while employed in Milwaukee but living at Wauwatosa, he rode a southbound trolley in a blizzard to see what would happen.

"I found out," he recalls. "We made it all right to the end of the line, but on the way we got stuck on a hill under the C&NW viaduct on 6th Street near Montana. Unable to budge, all the passengers had to sleep in the car for the night. Next day I trudged through the deep snow to 7th Street, hoping to find a North Shore train running. That line, too, was blocked, with long lines of silent, green, snow-covered cars bunched on the street. Unlike the local transit company, the CNS&M wires were down and the power off, leaving the cars cold and deserted.

"So I walked all the way into town. There I took the Milwaukee Electric interurban—the only public transportation running during the heavy storm—to a point nearest Wauwatosa and then hiked a couple more miles home. For two days not a train rolled into or out of Milwaukee. A week passed before the snowbound car lines were reopened and even longer before trolley-buses and buses resumed operation."

Around that time Frank edited *Railroads of America*, a lively volume of historical articles. In 1948 he moved to Minneapolis to write the M&StL book and has been living there ever since (114 West 45th Street). He and Jan have a 13-year-old son, Bob, and a library of nearly 1000 books that deal with railroads—one of the largest such collections we know of but exeeded by John W. Barriger's. For the past few years he has been engaged in social service work, writing railroadiana in between handling case histories for Hennepin County.

"My mainspring," he tell us, "is doing a job of recognized worth such as a book of some significance, even in a limited field. I think and act with as much freedom as I can in a world beset by conformity and dominated by materialism, a world in which the mass overshadows the individual."

Frank really toils over his manuscripts. They don't come easy. He enjoys research but is constantly tempted to put off or circumvent the task of batting out words on a typewriter. He is a bearcat for accuracy and he takes life seriously—too seriously, we think. We have yet to discover a touch of humor in any of his writings. He looks back wistfully to "the days when trains and trolleys vied with the motor car as a means of travel" and he keeps fit physically by hiking, playing volley ball, and eating a diet high in protein but low in starch and sugar. Both Frank and his wife are non-smokers, like most of the personalities thus far in our series of *Interesting Railfans*. Jan used to puff an occasional cigarette but quit the habit at age 13, long before she met Frank for the first time at a university dance. In common with Lucius Beebe, both are sentimental about "small, soft animals."

"Babies are cute," Frank concedes, "but they can't compare with puppies. My pet name for Jan is 'The Puppy'."

His main ambition right now is to get an assignment for writing a popularized, well-researched book on the history of any large railroad, with the privilege of riding over the entire system. •

Roster of D&RGW

Compiled by Sy Reich

Steam still runs on Silverton route.
Gerald M. Best

Servicing D&RGW diesel locomotive.

STEAM LOCOMOTIVES

Railroad Class	Road Numbers	No. in Service	Wheel Arngt.	Cyls.	B.P.	Dri.	Weight	Tract. Effort	Date Built
K-28	473-478	3	2-8-2	18x22	200	44	254,500	27,540	1923
K-36	480-488	6	2-8-2	20x24	195	44	286,600	36,200	1925
K-37	491-499	6	2-8-2	20x24	200	44	307,250	37,100	1928-30

DIESEL-ELECTRIC LOCOMOTIVES

Railroad Class	Road Numbers	HP	Builder	Model	Wheel Arrang't	Tract. Effort	Weight	Date	Notes
———	25	———	D&RGW	———	B-B	47,200	241,000	1953	1
DE B-B 26	38-43	380	GE	44 ton	B-B	26,400	89,000	1941-2	6
DE B-B 60	66-74	660	Baldwin	VO 660	B-B	59,700	198,500	1941	1
DE B-B 61	100	1000	GM-EMD	NW2	B-B	61,390	248,880	1941	
DE B-B 69	101-119	1000	Alco-GE	S2	B-B	69,000	230,000	1941-4	
DE B-B 72	120-123	1000	FM	ALT 100.6A	B-B	72,286	240,955	1948	
DE B-B 72	150-152	1500	FM	ALT 200.2A	B-B	72,270	240,900	1948	
DE B-B	3001-3028	2250	GM-EMD	GP30	B-B	61,735	257,000	1962-3	
DH C-C 104	4001-4003	4000	KM	ML-4	C-C	104,100	330,290	1961	
DE B-B 60	5100-5103	1500	GM-EMD	GP7	B-B	60,198	245,960	1950	
DE B-B 60	5104-5113	1500	GM-EMD	GP7	B-B	59,919	244,834	1952	
DE B-B 60	5200-5204	1600	Alco-GE	RS-3	B-B	60,198	248,000	1951	
DE C-C 89	5300-5304	1500	GM-EMD	SD7	C-C	89,294	368,300	1953	
DE C-C 89	5305-5314	1750	GM-EMD	SD9	C-C	88,844	367,020	1957	
DE B-B 60	5401, 5404, 5411, 5414, 5421, 5424, 5431, 5434, 5441, 5444, 5451, 5454, 5461, 5464, 5471, 5474	1350	GM-EMD	FTA	(B-B)x(B-B)	59,745	244,313	1942-3	2
DE B-B 60	5402, 5403, 5412, 5413, 5422, 5423, 5432, 5433, 5442, 5443, 5452, 5453, 5462, 5463, 5472, 5473	1350	GM-EMD	FTB	(B-B)x(B-B)	59,745	244,313	1942-3	2
DE B-B 57	5481, 5484	1350	GM-EMD	FTA	(B-B)x(B-B)	57,080	233,690	1944	3
DE B-B 57	5482, 5483	1350	GM-EMD	FTB	(B-B)x(B-B)	57,190	238,840	1944	
DE B-B 60	5491, 5494, 5501, 5504, 5511, 5514	1350	GM-EMD	FTA	(B-B)x(B-B)	59,745	244,313	1944	4
DE B-B 60	5492, 5493, 5502, 5503, 5512, 5513	1350	GM-EMD	FTB	(B-B)x(B-B)	59,745	244,313	1944	4
DE B-B 58	5521, 5524, 5531, 5534, 5541, 5544	1500	GM-EMD	F3A	B-B	58,089	241,235	1946	5
DE B-B 58	5522, 5523, 5532, 5533, 5542, 5543	1500	GM-EMD	F3B	B-B	58,089	241,235	1946	
DE B-B 59	5551, 5554, 5561, 5564, 5571, 5574	1500	GM-EMD	F7A	B-B	58,838	244,240	1948-9	5
DE B-B 59	5552, 5553, 5562, 5563, 5572, 5573	1500	GM-EMD	F7B	B-B	58,838	244,240	1948-9	7
DE B-B 60	5581, 5584	1500	GM-EMD	F7A	B-B	60,360	249,475	1949	
DE B-B 60	5582, 5583	1500	GM-EMD	F7B	B-B	60,360	249,475	1949	
DE B-B 60	5591, 5594, 5601, 5604, 5611, 5614, 5621, 5624, 5631, 5634, 5641, 5644	1500	GM-EMD	F7A	B-B	60,285	246,463	1949	
DE B-B 60	5592, 5593, 5602, 5603, 5612, 5613, 5622, 5623, 5632, 5633, 5642, 5643	1500	GM-EMD	F7B	B-B	60,285	246,463	1949	8
DE B-B 59	5651, 5654, 5661, 5664, 5671, 5674 5681, 5684, 5691, 5694	1500	GM-EMD	F7A	B-B	59,408	243,415	1950	
DE B-B 59	5652, 5653, 5662, 5663, 5672, 5673, 5682, 5683, 5692, 5693	1500	GM-EMD	F7B	B-B	59,408	243,415	1950	
DE B-B 60	5701, 5704, 5711, 5714, 5721, 5724, 5731, 5734, 5741, 5744, 5751, 5754	1500	GM-EMD	F7A	B-B	59,555	244,013	1952	
DE B-B 60	5702, 5703, 5712, 5713, 5722, 5723, 5732, 5733, 5742, 5743, 5752, 5762	1500	GM-EMD	F7B	B-B	59,555	244,013	1952	10
DE B-B 60	5761, 5764	1500	GM-EMD	F7A	B-B	59,915	248,120	1952	
DE B-B 60	5753, 5763	1750	GM-EMD	F9B	B-B	59,120	247,390	1955	10
DE B-B 60	5771, 5774	1750	GM-EMD	F9A	B-B	59,573	247,705	1955	
DE B-B 60	5772, 5773	1750	GM-EMD	F9B	B-B	59,573	247,705	1955	
DE A1A-A1A 49	6001, 6003, 6011, 6013	2000	Alco-GE	PA-2	A1A-A1A	49,264	204,440	1947	
DE A1A-A1A 49	6002, 6012	2000	Alco-GE	PB-2	A1A-A1A	49,264	204,440	1947	

D&RGW Diesel Notes

Roster is based on data from D&RGW Vice President-Operations and GE Locomotive Adv. and Sales Promotion Dept. and is accurate as of Aug. 8, 1963.

Locomotive builders: GE—General Electric; GM-EMD—General Motors—Electro Motive Div.; Alco-GE—American Locomotive Co.—General Electric; FM—Fairbanks Morse; KM—Krauss Maffei.

(1) 25 rebuilt from 68.

(2) The following units were traded in on GP30's: 5403, 5404, 5411-5414, 5423, 5431, 5432, 5442, 5444, 5451, 5453, 5461, 5471, 5473, 5474.

(3) 5481 rebuilt by GM-EMD to F7A with 1500 hp., 57,240 lbs. tract. effort, and 234,300 lbs. weight.

(4) Traded in on GP30's.

(5) 5531, 5571, 5552, 5553, 5643, 5644 rebuilt by GM-EMD.

(6) 38, 42 are still on the roster. Unit 39 sold to Sanford & Eastern, renumbered 14 (1st), then sold to Hoosac Tunnel & Wilmington, renum. 16. Unit 43 sold to HT&W, renum. 15; then sold to Saratoga & Schuylerville, not renum.; then sold to Claremont & Concord, not renum.; then sold to Raymond International.

(7) Original F9B 5762 renum. 5753 in '55. Original F7B 5753 renum. 5762 in '55. ●

70 Years Ago in Oklahoma

by Rolland Moore

EARLY settlers who poured into the old Indian Territory with the opening of the Cherokee Strip in 1889 camped beside a heap of gleaming white buffalo bones, parched by the Oklahoma sun, and called the place Skeleton. They built sod huts there and planted seed. The following year, after crops had permitted them to eat with a fair degree of regularity, they renamed the spot Dine spelled backward.

In 1893, when the Rock Island was laying steel southward across the state and into Texas, surveyors plotted a line to run through Enid. The settlers rejoiced. Enid, they predicted, would become a thriving city. As soon as they heard the gladsome news that the steam cars were coming, greedy land-owners raised the price of real estate in hopes of getting rich from the railroad.

But they overplayed their hand. They charged so much that the canny Rock Island refused to buy. Instead, the railroad company laid out a new community three miles to the north, called it Enid, and renamed the original settlement South Town and refused to stop trains there.

The farmers and shopkeepers were furious. They held protest meetings and swore vengeance on the railroad which forced them to drive their heavy-wheeled wagons over weary miles of dirt road to pick up freight shipments. Violence followed. Armed with rifles and shotguns, they fired on the trains that trailed smoke plumes through South Town without stopping. Lead slugs broke window glass in 4-4-0 cabs and wooden-bodied coaches. Engine crews ducked behind window frames while the terrified passengers, on instructions from conductors and brakeman, lay flat on the car floors.

One day a frame house on rollers was moved out onto the single-track railroad line and left there for hours, blocking traffic. Fearing to be picked off by sharpshooters, the train crews made no effort to shove it out of the way.

Not far from town was Boggy Creek —so named because its bottom of black gumbo mired cattle going there to drink, mired them so firmly that they had to be pulled out with lassoes. A railroad bridge crossed the stream. One cloudy night a gang of saboteurs, armed with crosscut saws and rifles, crept stealthily onto it. Working fast, they sawed the supporting timbers from underneath in such a way that the bridge would remain standing temporarily.

Then, hearing a hoarse engine whistle, they scattered and hid in the dark underbrush to watch results. A freight belching smoke and sparks steamed onto the shaky structure at ten miles an hour, operating under the slow orders that affected all trains crossing Boggy Creek. The timbers snapped with a noise like cannon fire, waking up the farm families for miles around. The engine, tender, and several boxcars splashed into the water, but the only casualty was a tramp in an empty car. Things like that happened now and then.

Shortly afterward, the law stepped into South Town and restored order. But by that time the expanding Rock Island had run into trouble elsewhere. The Choctaw Coal & Railway Company was building westward from Wister in eastern Oklahoma on right-of-way 200 feet wide acquired from the Federal Government in 1888, before Indian Territory became a state. When the Choctaw builders reached Oklahoma City, squatters living on the right-of-way there refused to get off. For four years the case was fought to a standstill in the courts. At length the Rock Island bought the harrassed railway.

Although the squatters had no title to the land, they would not budge until the city bought them out. The right-of-way that Oklahoma City finally turned over to the railroad was only 100 feet wide. Forced to accept this dirty deal, the Rock Island changed its mind about building southward from Oklahoma City. Instead, it built southward from El Reno, western terminus of the old Choctaw Railway. All passengers from the north with tickets to Oklahoma City had to change at El Reno to a shuttle train that the Rock Island ran between El Reno and Oklahoma City.

The latter is now a modern city of some 200,000 population and has active oil wells even on the State Capitol grounds. In fact, one well slanting thousands of feet deep was "shot" directly under the Capitol building. Enid today is a beautiful city, no longer known as South Town. The spite community that the Rock Island laid out in 1893 has become a ghost town. Trains don't stop there today. •

Shortlines of the Southwest

Locomotive roster compiled by Sy Reich

Apache Railway (Arizona)

Road Nos.	HP	Builder	Bldr.'s Mdl.	Whl. Arrngt.	Tr. Eff.	Weight	Built	Notes
100, 200	1000	FM	ALT 100.6A	B-B	34,000	240,000	1947-8	
600	1200	BLHW	S-12	B-B	34,000	240,000	1952	
700, 800, 900	1800	Alco Pr.	RS-11	B-B	75,000	260,000	1962	

Magma Arizona Railway (Arizona)

Road Nos.	Whl. Arrngt.	Cyls.	Dri.	BP	Weight	Tr. Eff.	Builder	Built	Notes
5	2-8-0	22x28	52	190	198,000	42,900	Alco	1922	
7	2-8-2	21x26	54	185	175,400	33,400	Baldwin	1917	2

San Manuel Arizona Railroad (Arizona)

Road Nos.	HP	Builder	Bldr.'s Mdl.	Whl. Arngt.	Tr. Eff.	Weight	Built	Notes
1-2	1600	Alco	RS-3	B-B	53,000	260,000	1954-5	

Tucson, Cornelia & Gila Bend RR. (Arizona)

52	1000	GM-EMD	NW2	B-B	62,500	248,000	1947	

Texas-New Mexico Railway (New Mexico)

Owns no motive power; uses Texas & Pacific locomotives.

Nevada Northern Railway (Nevada)

401	1500	GM-EMD	SD7	C-C	71,950	294,810	1952	

Carbon County Railway (Utah)

1201-1202	1200	GM-EMD	SW9	B-B	62,000	250,000	1953	3

Ogden Union Ry. and Depot Co. (Utah)

Owns no motive power; uses UP and SP locomotives.

Salt Lake City Union Depot and RR. Co. (Utah)

Owns no motive power; uses D&RGW locomotives.

Salt Lake, Garfield & Western Ry. (Utah)

DS-1, DS-2	380	GE	44-ton	B-B	26,500	88,000	1942	4

Tooele Valley Railway (Utah)

100	1200	GM-EMD	SW1200	B-B	60,790	246,320	1955	

Utah Railway (Utah)

300-306	1600	Alco-GE	RSD-5	C-C	79,500	360,000	1952	

Southwestern Roster Notes

Roster is based on data from Auditor of Apache Ry., Chief Mechanical Officer of MP, General Manager of CC, and Superintendents of SMA, TC&GBRR, NN, OUR&DC, SLCUD&RR, SLG&W, TV, and Utah Ry., and is generally accurate as of end of third quarter, 1963.

Locomotive builders: FM—Fairbanks-Morse; BLHW—Baldwin-Lima-Hamilton-Westinghouse; Alco—American Locomotive Co.; Alco Pr.—Alco Products; GE—General Electric; GM-EMD—General Motors-Electro Motive Div.; Alco-GE—American Locomotive Co.-General Electric.

(1) Ex AE&NB 26. (2) Ex T&G 30. (3) Ex Duluth, Missabe & Iron Range 11 and 14. (4) Ex N.Y., Ontario & Western 104 and 105. •

Steve Maguire's

TRANSIT TOPICS

Steve Maguire

SUBWAY-EL cars of the not-distant future will be longer, with low silhouettes, higher operating speeds, maximum seating capacities, air-conditioning, and other passenger comforts. Such equipment for urban areas that include Washington, San Francisco, Los Angeles, Atlanta, and South Jersey is forecast by David Gaul, executive secretary of the Institute for Rapid Transit, a U.S.-Canadian non-profit organization with headquarters in Chicago.

Mr. Gaul also predicts that the rail rapid transit car, already vastly improved since World War II, will continue to undergo major changes for greater operating efficiency and passenger comfort in the nation's urban centers with existing systems.

Addressing a committee of the American Society of Civil Engineers, Mr. Gaul indicated that the most pronounced changes in the rapid transit car, especially in styling and design, could be expected to occur for the entirely new rapid transit systems not limited by platform heights and other physical features of existing systems.

"It is becoming obvious that one major trend is in the direction of a longer car," he said. "This trend has been typified by two recent orders of new cars for Boston and Toronto."

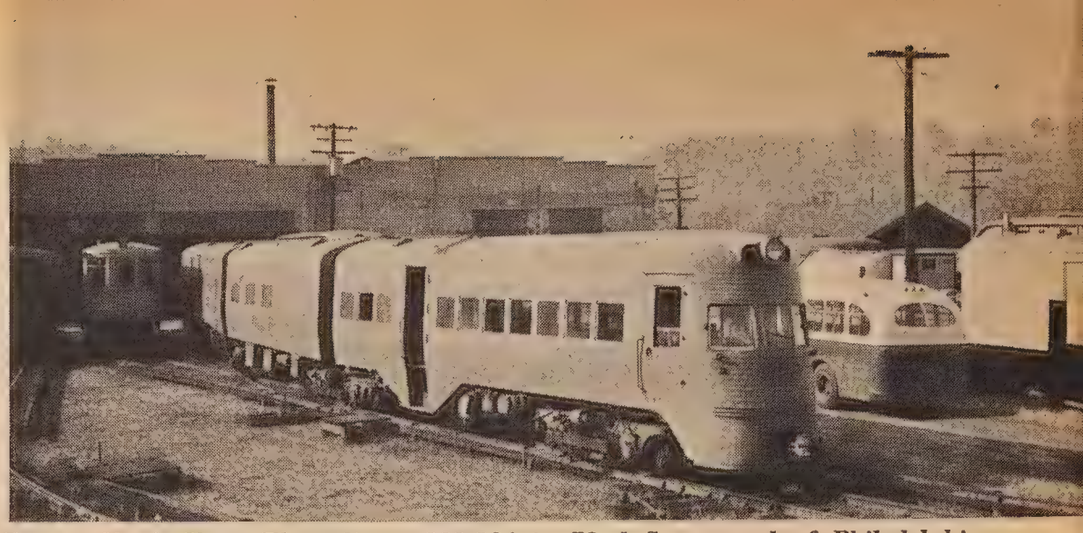
BALTIMORE TRANSIT ended its trolley operation in the dark early morning of November 3, 1963, its last two through-routed lines being "bussed." One of the two, Towson-Catonsville, 16 miles, was at the time of abandonment the country's longest streetcar line.

Throughout the day most of the cars ran behind schedule because of special carloads of trolley buffs having farewell trips. Jack Light, manager of York Road car barn, harassed by closing-out paper work, found himself besieged by trolley fans seeking souvenirs.

"Souvenirs!" he told us. "They want the last this and the last that."

Because of the system's odd gage, 5′4″, we doubt that any car will be preserved for operation elsewhere. With this abandonment, there is no trolley line left in that vast area of the U.S.A. south of Philadelphia and east of New Orleans.

Someone sent us this comment on the passing of time: "The first man to ride a rocket to the moon will probably be one who never rode a streetcar."



Former North Shore Electroliners 803-804 in 72nd Street yard of Philadelphia Suburban Transportation, which now seeks Reading trackage to lengthen its run.
Stephen D. Maguire, 1411 River Rd., Belmar, N.J.

MONORAIL has been ruled out for the rapid transit systems proposed at San Francisco and Los Angeles. The Bay Area Rapid Transit District of S.F. will build a $792 million system using two-rail metal track with lightweight cars. Monorail lost out mainly because it can't match rail transit in speed and because the switching and sway difficulties haven't been solved.

Newest proposals of the Los Angeles Metropolitan Transit Authority call for a 64-mile line costing $669 million. It would run east-west from El Monte to Beverly Hills and north-south from Van Nuys to Long Branch. There would be 19 miles of subway, 38 of elevated, and 7 of surface lines. LAMTA passed up monorail, saying it lacks the safety, speed, capacity, comfort, efficiency, flexibility, and general aesthetics of standard two-rail transit.

While L.A. plans remain in the dream world, San Francisco will soon begin building the first 4½ miles of track along the old Sacramento Northern right-of-way from Walnut Creek to Concord. To permit this, the SN is seeking permission to abandon its freight service over that route, writes Ralph Kerchum, 4350 Bridgeview Dr., Oakland 2, Calif. The track will be used for tests to determine the best kinds of construction and equipment for the rest of the system.

Budd Company holds a contract to develop and test a new rail truck for the Bay Area, which is now designing the new 75-mile system for the city and environs and which plans to run the first passenger trains within five years. The trucks, with air springs, will be lighter than conventional trucks and give quiet, comfortable riding.

Meanwhile, in San Francisco, the cable cars were given a vacation of more than a month because of extensive repairs needed on the entire system. Much of the line had been operating continuously since 1900, even back as far as 1890, without any replacement except for maintenance.

SCOLLAY SQUARE station on the Boston trolley subway closed forever on October 27th when that part of the line which served it was diverted to the new Government Center station serving the $100 million complex of Federal and city buildings erected near the Square. Old trackage in the Adams Street station, bypassed by the new route, also has been eliminated. It had been in use since 1901, reports James Crimmins, 5 Bonnie Dr., Exeter, N.H.

PHILADELPHIA'S Mayor Tate, reelected last November, is seeking Federal and state money for a new pedestrian mall to be built along downtown Chestnut Street, a smart shopping area. A $4 million plan would create a large new pedestrian shopping center from which autos would be barred. But a new trolley line would be installed, with small cars providing easy loading and unloading. If the project is okayed, construction would start this year.

ELECTROLINERS, with few modifications from the days they were name-trains on the North Shore line, have gone into rush-hour service on the Philadelphia Suburban. The two streamlined four-section articulated units have undergone door changes and loading variations, as the trains are narrower and have higher loading platforms than standard PST equipment.

Philadelphia Suburban also bought Liberty Lake substation from the North Shore and has set it up at 72nd Street. In all, the North Shore line has sold at least 34 good interuban cars, mostly to museums. Iowa Terminal Ry. of Mason City acquired two of its freight motors.

PST, in a surprise move, asked Reading Railroad for the right to acquire its

No. 320, formerly of the Chicago, Aurora & Elgin but now owned by the Iowa Railway Museum, is seen on a recent fantrip over Southern Iowa Railway tracks.
James D. Johnson, 519 S. Prospect, Wheaton, Illinois

Baltimore Transit test car No. 3550 (Brill, 1902), used as rail-grinder, on final day of Baltimore trolleys.
Stephen D. Maguire

20-mile Chester Valley one-a-day freight line between Bridgeport and Downingtown, Pa., so it can electrify the route and run to Norristown via its P&W third-rail line, using Electroliners for commuters in an area now without fast service. Andrew Maginnis, who sent us the news, says the proposed extension is along the route planned originally by Phila. & Western founders.

NEW ORLEANS Public Service ran into organized resistance to its plan to abandon its Canal Street trolley line and run buses down a freeway in mid-street where trolleys now run.

A group organized to fight the change and especially the six councilmen who voted for the buses is *Streetcars Desired, Inc.* Behind it is Mrs. Rita LeGrand, who has found considerable encouragement in getting 10,000 signatures needed to bring about a referendum on it. *Streetcars Desired Inc.* may be contacted at 116 S. Murat St., New Orleans, La., 70119.

MORE THAN 30 years ago, PSC protected the traction-orange interurbans of the Buffalo & Lake Erie as they struggled for life from Erie, Pa., through Westfield and Dunkirk, N. Y., to Buffalo, writes William C. Kessel, 99 Center St., Hamburg, N. Y. The newfangled bus line was restricted from carrying passengers between Westfield and Dunkirk and between Westfield and Buffalo.

Greyhound took over the local bus operation, inheriting the restriction. Months ago, a local bus line accepted the local commuter-type operations that Greyhound no longer wanted. The old restriction continued. However, instead of the every-hour departure that B&LE patrons used to enjoy, this new company has but a single daily round trip between Westfield and Buffalo. Greyhound wants to sell tickets on their trips, which are twice as frequent.

And the NYC, which has chopped local service so drastically? Twice as many train stops as that bus carrier! Nickel Plate has a round trip, too, but tries to avoid the local stops. Can't blame the buses. Private autos and toll roads are more to blame for diversion of traffic. Yet the thought that "you can always get a bus" isn't true for many American cities, such as Westfield, which once was served by two steam roads and three interurbans.

NEW streetcar museums are appearing. Latest is the Minnesota Transfer tracks in Minneapolis where ex-Twin City car 1300, in fine condition, was operated last summer by the Minnesota Transportation Museum (for the first time May 25, 1963). The car is powered by an engine-generator unit attached to the rear on a small separate truck that could move the trolley at speeds up to 25 miles an hour. No overhead has been erected.

The 1300, built by Twin City R. T. in 1908, was one of 1021 trolleys owned by the company and one of the very few saved when the officials then in charge scrapped the whole trolley system under circumstances that eventually sent some to jail. The Minnesota Museum is looking for a permanent operating location, writes Rev. Homer G. Benton, 5253 Abbott Ave., Minneapolis 10, Minnesota.

Another new museum will soon be operating near Golden, Colo., where the Rocky Mountain Railroad Club is building a 600-foot trolley line its their Birney car, ex No. 22 of Ft. Collins Municipal Ry. According to Jim Cumbie, 3629 Purdue, Dallas, Texas, work on grading the line has already been started and it is hoped that the Birney car can be running next summer.

POSSIBLY the world's lowest streetcar fare was found by Earl Clark, publisher of *Directory of World Electric Lines,* on a recent trip to Brazil. At Campo Grande, near Rio, Earl found the trolley fare to be the equivalent of 1/20th of one cent in United States currency. The little trolley system, operated by the Federal District, runs single-trucked open cars with bow-type trolleys. Earl (825 Taft Rd., Cincinnati, O.) says he rode around Campo Grande for hours for about half a cent.

Fare on the Madrid subway (Metro) and Spanish streetcars costs slightly more than the equivalent of one cent in American money, reports Freeman Hubbard, editor of *Railroad Magazine,* who rode the Metro as well as trolleys in Madrid, Seville, and Cordoba on an overseas tour last fall.

WANTED: data on all Birney cars ever built, number of cars of each company, records of second-hand sales, alterations and ultimate disposition of such cars. Dr. Harold E. Cox, 80 Virginia Ter., Forty Fort, Pa., who has just published *Surface Cars of Boston,* will soon do a story on Birney cars, of which more than 6500 were built for U.S. and foreign lines. (Birney car articles appeared in Aug. and Sept. '44 *Railroad Magazine.*)

MOST unusual PCC car is Bruxelles 7501, according to W. J. Wyse, 27 Lexton Gardens, London, S. W. 12, England, overseas editor of *Modern Tramway* magazine. The 7501 is a six-axle articulated trolley with only four motors, also two accelerator units, one in each half, mechanically coupled. Its motors have been modified so it can accelerate through series and then parallel. The arrangement means current economy, something important on European tram lines, also greater braking current.

North American Lines

THE FOLLOWING list of North American streetcar and interurban lines currently operating, compiled by Robert L. Abrams and Raymond DeGroote, is reprinted from a recent issue of *The Bulletin,* National Railway Historical Society, whose editor is Alan G. Hunn, 5712 N. Camac St., Philadelphia, Pa.

No. 9 of Ohio's first interurban line, the Sandusky, Milan & Norwalk, beside the old West House in Sandusky, carried passengers, mail, and baggage. Illustration from Morrison book (reviewed here).

One of the earliest photographs taken by Frank P. Donovan, Jr. (see page 32) shows a single-truck car on the Ocean City (N.J.) Electric Railroad at the end of the line in 1927. During the winter it was the only car operated over the line and served as school car for children.

CALIFORNIA. Municipal Ry. of San Francisco: J Church, K Ingleside, L Taraval, M Oceanview, N Judah, California St. (cable), Powell-Hyde (cable), Powell-Mason (cable).

ILLINOIS. Chicago South Shore & South Bend RR.: Chicago-South Bend, Ind.

LOUISIANA. New Orleans Public Service, Inc.: Canal, St. Charles.

MASSACHUSETTS. Metropolitan Transit Authority (Boston): subway: Beacon St. (Cleveland Circle-N. Station), Commonwealth Ave. (Boston Col.-Park St.), Highland Branch (Roverside-Lechmere), Huntington Ave. (Arborway-Park St.); other car line: Mayyapan-Ashmont (hi-speed trolley line).

MISSOURI. Bi-State Transit System (St. Louis): 10 Delmar, 11 University, 12 Hodiamont.

NEW JERSEY. Public Service Coor. Transport (Newark): 7 City Subway.

OHIO. Shaker Heights Rapid Transit: Shaker Division, Van Aken Division.

PENNSYLVANIA. Philadelphia Suburban Transportation Co.: Ardmore, Media, Norristown (third rail), Sharon Hill; Philadelphia Transportation Co.; Subway Car Lines: 10 Lancaster Ave., 11 Woodland Ave., 13 Chester Ave., 34 Baltimore Ave., 36 Elmwood Ave.; Other Car Lines: 6 Ogontz Ave., 15 Girard Ave., 23 Germantown Ave.-10th & 11th, 47 Olney-8th & 9th, 50 Lawndale-4th & 5th, 53 Wayne Ave., 56 Erie-Torresdale Aves., 62 Darby-Yeadon shuttle; Pittsburgh Railways Co.: 6 Brighton Rd., 8 Perrysville Ave., 10 West View, 13 Emsworth, 15 Bellevue, 21 Fineview, 22 Crosstown, 35 Library, 36 Drake, 39 Brookline, 40 Mt. Washington, 42 Dormont-Mt. Lebanon, 44 Knoxville, 47 Carrick via Tunnel, 48 Arlington, 49 Beltzhoover, 50 Carson St., 53 Carrick, 55 East Pittsburgh via 2nd Ave., 58 Greenfield, 64 Wilkinsburg-East Pittsburgh, 65 Lincoln Place, 67 Swissvale-Rankin-Braddock, 71 Negley, 73 Highland, 75 East Liberty-Wilkinsburg, 76 Hamilton, 77/54 North Side-Carrick, 82 Lincoln, 85 Bedford, 87 Ardmore, 88 Frankstown.

TEXAS. El Paso City Lines: Ciudad Juarez.

CANADA (Ontario). Toronto Transit Commission: Bathurst, Bloor, Carlton, Coxwell, Dundas, Earlscourt, Fort, Harbord, King, Kingston Rd., Long Branch, Parliament, Queen, Rogers Rd., St. Clair.

MEXICO. Servicio de Transportes Electricos del D. F.: 2 Azcapotzalco-Artes, 3 Azcapotzalcos-Av. Hidalgo, 5 Portales-La Villa, 6 Tetepilco-Mixcoac, 11 La Rosa, 31 La Villa, 51 Guerrero, 53 Tlalpan-La Villa, 54 Xochimilco, 71 Valle, 82 Primavera, 93 Obregon-Insurgentes, 94 Obregon-Bucareli; Cooperativo de Transportes Urbanos y Suburbanos (Veracruz): Bravo Laguna, Panteones, Pino Suarez, Playa Bravo, Playa Prim, Villa del Mar, Villa Bravo; Transportes Electricos S. C. L. (Tampico): Tampico-Miramar.

New Electric Publications

TROLLEY THROUGH THE COUNTRYSIDE, by Allison Chandler, 384 pages, 8½x11", 150 illustrations, maps, indexed, published by Alan Swallow, 2679 S. York St., Denver 10, Colo., $12.50

Chandler, a Kansas newspaperman, relates some fascinating true tales of 15 transit lines in Kansas, ranging from the plodding horsecars in Strong City to the fast interurbans out of Kansas City. He visited many towns through which those lines used to run, talked with old-timers who remember them, and read newspaper files for further information.

Especially interesting are his accounts of operation in the mining and natural-gas areas, including the Iola Electric that gave up in 1919 when gas production ended. He tells, too, about the Westmoreland Interurban that never saw equipment more modern than a 1907 White steamer or a 1912 Mitchell automobile on rails, and the Manhattan City interurbans that finally ran railbuses, and the grand attempt of the Strong interests to operate gas-propelled passenger interurbans out of Kansas City, a fiasco that ended because none of the cars could easily negotiate the system's one hill.

In each story the author has made the trolley lines and people of long ago seem very real. Years of patient research and writing by an *aficionado* have thus yielded a rich harvest of information and entertainment.

No. 6 of the old Arkansas City-Winfield Electric Railway in Kansas, about 1905.
Illustration from Allison Chandler's new book (reviewed here)

CALGARY MUNICIPAL RY., a 10-page history by Peter Cox, with photos, roster, map, appeared in Sept. '63 issue of "The Steam Chest," monthly publication of the West Coast Railfans Assn., P.O. Box 2790, Vancouver 3, B.C., Canada. Annual subscriptions to "The Steam Chest" costs $3. Readers interested in single issues may contact the Association.

Orange Empire Trolley Museum, P.O. Box 501, Perris, Calif., has published a single-sheet reproduction for 25¢ of the last official (1962) track map of the Los Angeles M.T.A. which even shows the location of track switches. The Museum also has just issued postcards picturing car 3100 and railgrinder 9310. These, with an earlier postcard of PE motor 1624, are in stock at 5 for 25 cents. OETM has a list of railfan publications in stock, the proceeds from which go toward museum projects.

Reproductions, including CD & Marion emp. tt. of 1919, Ohio P.S. 1916; So. Ohio P.S. 1927, and others may be obtained as a set of 6 for $3 from James D. Johnson, 519 S. Prospect, Wheaton, Ill. These are exact reproductions of the originals and we hope they will be stamped to indicate this. In our last issue we erroneously gave a box number for Mr. Johnson. Anyone not hearing from him at that address should write to his home.

CITY AND INTERURBAN CARS, deluxe reprint of 1911 J. G. Brill illustrated catalog, 70 pages, 8½x11", staple-bound, $3.75, covers the field from passenger cars to freight and work motors and is recommended especially for model builders. Contact Pacific Railway Journal. P.O. Box 91, San Marino, Calif.

THE SANDUSKY, MILAN & NORWALK ELECTRIC RY., by R. G. Morrison, 16 illustrated pages, 5x8", staple-bound, $1.25, includes personal recollections of early days on Ohio's first interurban (later part of Lake Shore Electric). The author's father, who had a store on the old route, took photos of the line in 1892. Contact Mr. Morrison at 1259 Union Commerce Bldg., Cleveland 14, Ohio.

CARS OF SACRAMENTO NORTHERN, by Ira L. Swett, 8½x11", 114 well-illustrated pages, heavy staple binding, $3 from author, 216 S. Western Ave., Los Angeles 4, Calif. Excellent photo-roster of SN and predecessors, subdivided into cars of various builders and company divisions. Printed on fine paper; many hitherto unpublished photos beautifully reproduced.

SURFACE CARS OF BOSTON, 1903-'63, by Dr. Harold E. Cox and O. R. Cummings, 8½x11", 72 illustrated pages, staple-bound, $2. Roster of every type trolley ever used on Boston system, with pix of each type. Authoritative publication by men well known in their field, but offset printing makes the photo reproductions only fair. The typed print in the text leads us to believe that, at a later date, the authors may regret not having used standard priniting. Copies available from Dr. Cox, 80 Virginia Terr., Forty-Fort, Pa.

SEMI-CONVERTIBLE CARS, BOSTON ELEVATED RY., 30 illustrated pages, 8½x11", staple-bound, $2.50. Similiar to the Cox-Cummings book except that its illustrated roster begins in 1905, two years later. Relatively little text material but good photo coverage of the many car types. Boston fans are lucky to have two such books. For copies of Semi-Convertible book write to Boston Street Ry. Asso., P.O. Box 102, Cambridge, Mass., which also sells set of four 8x10" older Boston photos for $1.50. ●

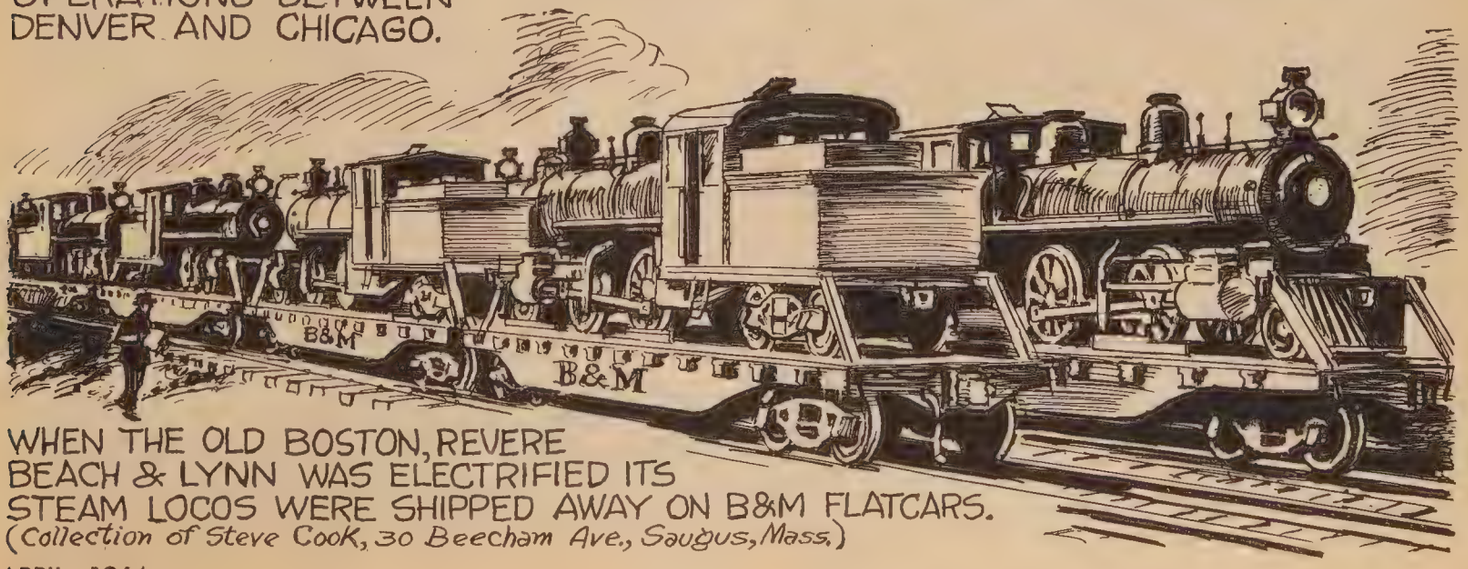
ALONG THE IRON PIKE

by Joe Easley

NORTHERN PACIFIC 4-4-0 EN ROUTE TO CINNIBAR, MONT., IN 1883 WITH TRAINLOAD OF TOURISTS FOR YELLOWSTONE NATIONAL PARK. (Copied from original photo Haynes, Inc. Box 88, Yellowstone Park, Wyo.)

WALKIE-TALKIE RADIOS IN PASSENGER SERVICE. CONDUCTORS ON DENVER ZEPHER (CB&Q) NOW USE THEM TO SPEED OPERATIONS BETWEEN DENVER AND CHICAGO.

AFTER REMOVAL OF RAILS, FLOWERS WERE PLANTED IN TRACK BED ON WHICH SUBWAY TRAINS USED TO ROLL AT SOUTH KENSINGTON STATION OF LONDON MUNICIPAL TRANSIT SYSTEM.



WHEN THE OLD BOSTON, REVERE BEACH & LYNN WAS ELECTRIFIED ITS STEAM LOCOS WERE SHIPPED AWAY ON B&M FLATCARS.
(Collection of Steve Cook, 30 Beecham Ave., Saugus, Mass.)

BRASS BUTTONS

Fiction Story by Edmund Pugsley

A WONDERFUL stream, we're old, is the River of Time. Its swift-moving current along the boy-and-girl friendship of Tim Martin andand Greta Hanson and then—Well, you know how it is. You see a couple of leaves floating peacefully downstream side by side but suddenly they're separated by a tiny snag around the bend, apparently for no reason at all, and after that each one goes on alone.

Thus it was with Tim and Greta. Tim was a trackman on an interurban line, the Gulf Coast Electric—well built, sandy-haired, strong, and capable. Not bad-looking, either, except for an ugly scar across his nose. This scar wrecked his life illusion; it gave him an inferiority complex. You've met such fellows—and girls, too. They're sensitive over some slight physical defect and this sensitivity colors their whole lives. It isn't the blemish itself but the way they react to it that causes the trouble.

Tim's scar dated back to school days. He and Greta Hanson, the section boss's redheaded daughter, used to go horseback riding together. They were really only farm horses, but Tim's got too frisky one day and planted a hoof in his face. When he finally came out of the hospital and looked at himself in a mirror, his self-confidence received a terrible shock and Tim refused to go back to school.

From that day on he made a point of underselling himself. He even avoided meeting Greta as long as he could. She was a lovely girl, too, trim and shapely any way you looked at her. A pretty face, perfect legs, and full breasts that jutted out almost impudently. Tim had become increasingly aware of these charms but now, self-conscious over his scar, he stuck close to the barn day after day, doing unnecessary chores and moping around. At length his father spoke to the section boss about him.

Alex Hanson, a powerful blond Swede, went to the house one evening and looked the youth over. A few days later Tim started carrying a dinner pail with Hanson's gang and doing a man's work on the section. He rarely spoke but developed muscle and a rich tan. "Dumb," the casual world would have termed him. "Strong of back and weak of mind." But the casual world doesn't know much psychology.

Nearly two years after the accident Greta began working for the railroad on the telephone switchboard. During those two years Tim's black eyes had been following her from a distance, admiring her poise, her mass of curly auburn hair, her breasts, and her neat little behind, but rarely getting close enough to see her smile.

Nobody suspected the misery that lay back of his eyes nor the aching load which Tim kept tamped tightly down between his great shoulders. The other men would have laughed if they had suspected. What chance would a dumb ox like Tim Martin have with the slim and beautiful Greta, even though they did use to go to school together and go horseback riding side by side.

Then T. Worthington Russell, known as "Dandy," came barging down the River of Time into the lives of these people. Dandy was a motorman on the Gulf Coast Electric, and Tim and old Axel and the girl rode his cars home every night. They were quaint little cars, with light springs which seemed to skip

She watched the angry whiplash of the rope snap about Tim Martin's arm. The trolley had fouled a guy wire.

over the rails, this run being called "the squirrel."

Dandy was undoubtedly the best dressed man on the road; that's why he got his nickname. Well-tailored new uniform with brass buttons. You know how it is. On top of that, he was young and handsome and had a knack of making himself agreeable to the passenger, male or female. Everybody liked him.

Among his admirers was Tim Martin. Tim would stand in the rear vestibule, lean out the window and watch the pair of coaches bob along. And there, listening to the wail of the interurban whistle for nearly an hour each evening, the ache within him was all forgotten in the ecstacy of imagination. It was a period when the young gandy dancer felt himself to be a reckless, dashing, jaunty motorman like T. Worthington Russell. Wearing a uniform, too, with brass buttons.

YOU'D think Old Man River was satisfied with dealing out such a handicap to young Martin. But not so. Here, right in the midst of his one hour of real pleasure, comes another jolt.

Gazing out from his usual place one evening, Tim saw a slender feminine figure slip from the middle step at Longbridge and run lightly ahead to climb into the front vestibule—the forbidden sanctum of the motorman. The slender figure was none other than Greta Hanson, riding with Dandy and probably swapping wisecracks with him. Tim's lips tightened.

After that the nightly home trips for the young tie-tamper were utterly ruined. Instead of an hour's exhilarating release, they became an hour's added bitterness.

This bitterness welled to the top and finally ran over. Then the "dumb" brain

back of the scarred face regained a little courage and began to form a plan.

One evening between quitting time of four-thirty and the home train of five o'clock, Tim stood before the great and mighty ruler of the Gulf Coast Electric Lines, old Ben Collins himself, to make a halting, stuttering appeal for a job as motorman.

Mr. Collins leisurely took off his reading glasses before answering. Tim fidgeted with his hat as the deep red flush on blemished face added to the embarrassment of both men.

"A motorman?" Mr. Collins said.

Tim edged an inch closer. "Sure, I could do it. I could learn, all right."

The crow's-feet wrinkles under the superintendent's eyes showed a trace of merriment, then faded out. For Mr. Collins had caught the significance of a grim-set jaw.

"No, Martin," he replied, "We don't need any motormen just now."

The big boss took up his evening paper, while Tim, finding no further argument, turned and clumped out. He reached the trainshed just too late to catch the Squirrel, but in time to see Greta swing gaily onto the front car where Dandy was.

NOBODY but a dumb trackworker would have persisted with a man like Ben Collins. A month later he was again twirling his hat before the super and receiving a sharper refusal. But this time, instead of retreating. Tim advanced till he was right against the desk.

"Will you just give me a chance, Mr. Collins?" he entreated.

The official sat up straight. Drumming a pencil, he asked: "What's the idea of this sudden ambition, Martin? You aim to get married or something?"

The scar stood a snowy white against the scarlet background. "Greta likes motormen best," he blurted out.

"Hanson's daughter?"

Tim nodded, Mr. Collins wasn't such a bad sort when you got to know him. A sudden desire to unload his burden swept over the section hand. Here was his chance. No man, not even Mr. Collins, could refuse a favor that concerned Greta.

"Sure!" he enthused. "Greta Hanson. She's my girl—always was! But she thinks a motorman is better than a trackman. You'll give me a try-out, won't you, Mr. Collins, so I'll have a chance against Dandy Russell?"

Mr. Collins was impatient to end a painful interview. "I'll let you know, Martin, if I need you."

Tim, seeing nothing and hearing nothing but those last words, set his feet in motion toward the trainshed with such zest that he caught the five o'clock Squirrel.

For the first time he felt no bitterness when Greta rode the front end south from Longbridge. He had more interesting thoughts. And at Parson's Road, while old Axel stopped to talk with Tim's father in the field, Tim hurried ahead to walk beside Greta.

The girl had no time to be surprised before Tim opened the subject that was burning him up.

"How'd you like to see me a motorman, Greta? "You know, with a uniform and brass buttons and all that."

She stared at him. "You, Tim?"

"Sure!" he grinned sheepishly. "I got the promise of first chance from Mr. Collins tonight. Ain't you glad, Greta?"

For an eternity the girl stood there just staring into Tim's face and saying nothing. And slowly his enthusiasm died as he she said, "Oh, Tim! They're making fun of you!" and whirled about to run wildly up the Hanson lane.

Next day he tried to puzzle it out, unwilling to believe that Greta had no faith in the promise of a better job. And then Dandy Russell came roaring down with the first morning trip of the Squirrel, tooting his chime whistle. The little interurban train slowed up beside the Hanson section gang and the motorman called out good-naturedly:

"Hi, Scarface! I hear you're going to bump me off this run! When do you get your new uniform?"

Then the Squirrel moved away and disappeared down the horizon. The other track workers winked and snickered. Tim said nothing, but his eyes became sullen.

THEREAFTER Tim avoided the Squirrel for several evenings. He did a lot of serious thinking—or rather, brooding. Then he reached a decision. He would tell Axel he was quitting at the end of the month and he'd go away, perhaps to try his luck at a lumber camp. Railway work and Greta Hanson were not for him.

Next morning, instead of taking his favorite corner seat at the rear of the smoker, he walked straight through to talk with Alex Minchin, he old motorman who alternated witth Dandy. If anyone could be depended upon to understand him, it was Alex.

The veteran pushed over his stool. "Sit down, Tim," he said.

Tim sat while they ran a mile, picking up passengers at the little sheltered stations. Finally he blurted out: "I'm

quitting at the end of the month, Alex."

"Quitting?"

The youth nodded. "Going to try one of the lumber camps."

Alex suggested: "You'll find that a tougher job than trackwork, Tim."

The trackman said nothing to that but kept watching each motion of the veteran's hand's. Then he got up from the stool, stepped across behind the motorman, and asked impulsively:

"I'd like to hold those handles—just once. Do you mind?"

Alex shut off and glanced around. He met a pair of sincere dark eyes. "Why, I guess maybe you can, lad," he agreed. "Sure! Take her and see what you can do."

The gray-haired motorman felt a tightening in his throat as he watched his pupil. If Tim had been holding the cup of wine for his first communion he could not have shown more reverence.

Alex knew it was against the rules. So did Tim, for that matter. But before they crossed the river to Longbridge a compact had been formed between this strange pair—a compact that overruled Tim's resolution about going away to a lumber camp.

And so every morning the young gandy dancer rode the front end with Alex Minshin, gripping the controls, learning to run the cars, and asking questions that amazed the experienced motorman witth their grasp of technical detail.

Every day Tim tamped ties, slashed brush or cleaned ditches for Axel Hanson, ignoring the jibes of Dandy Russell and others. And in the evening, when Greta would have paused to talk with him at Parson's Road, Tim merely spoke courteously and passed on, leaving her to gaze after him witth a puzzled frown.

In time Tim came to operate the Squirrel almost efficiently as Alex himself. He had absorbed all the technical knowledge that the veteran could give him.

One morning Tim asked: "Did you ever have the brakes fail when the trolley was off?"

"Yes," Alex replied. "Just once. The trolley jumped as we took a siding. When I set the air we didn't stop till we hit the stop block. Later I found out that the pull-rod pin was broken. I've been fighting even since to get a battery to protect an emergency reverse in such a case, but Mr. Collins says the cost doesn't warrant it. Well, if the brakes ever fail on a down hill it'll be just too bad, that's all."

When Tim was getting off that morning Alex said "Why don't you hit the boss again for a job?" They could use another motorman this summer."

TIM strode off, shaking his head. But Alex's words stuck to him all day as he tamped ties. That night at quiting time, four thirty, he headed straight for the terminal and stood before the throne of Ben Collins.

Unwittingly he had chosen a bad moment; the super was in ill humor. The evening paper told of a court case decided against the line. Collins caught a glimpse of his visitor, heard his mumbled inquiry with a savage glare, and shouted:

"No! Didn't I tell you I'd let you know if we wanted you?"

"Yes, sir," admitted Tim, twirling his hat. But he didn't turn tail.. "I was just thinking, Mr. Collins, that maybe you'd sort of let me break in on my own time, of course, nights or Sundays. Then when you need a man in a hurry—why, I'd be ready to start. Don't you think it's a good idea?"

Collins didn't. "I think," he roared, "it would be a good idea for you to go back to your section job and quit bothering me. You'll never make a motorman, Martin! and that's final. You're not the type, that's all!"

Tim turned sadly on his heel and clumped out and down to the trainshed. The whole world was tumbling about his ears.

That blue coat with brass buttons which he often dreamed about suddenly seemed to vanish.

Down in the shed was confusion about the five o'clock Squirrel. Someone had failed to bring the second car to couple on; and there were enough people for two carloads, and the train was due. There'd be a row when Mr. Collins heard of it, Tim conjectured. He ambled along opposite the head end. No chance of getting on this trip. He was stuck now until the extra at five thirty.

Then he heard his name called. It was Dandy, holding the front door open. With him stood Greta, beckoning and smiling. The trackman shook his head and kept on walking, but Greta said, in a clear musical voice: "Come on, Tim! I want to speak to you."

Tim, hearing that tone from the girl for the first time in years, retraced his steps and leaped aboard.

Two minutes later the single unit, 101, was heading out across the viaduct and Dandy asked with a grin: "Bent on getting an order to break in on the head end, Tim?"

The scarfaced youth answered glumly: "He won't give me a chance. I'm quitting tomorrow night."

"Quitting?" Greta's fingers pressed his arm. "Oh, Tim, *no*!"

AS the traffic grew heavier their conversation lapsed. Tim watched the motorman's deft handling of the car while it shot across busy intersections with wigwag signals working, but tonight the sad reality that he could never be like Dandy—never hear praise from Greta for his expert work—over-shadowed his usual joy at riding the front end. Mr. Collins had said, "You're not the type."

Little things often play big parts in the affairs of men. The conductor was collecting fares from nearly four score jostling passengers and apparently had left the operating worries to his motorman, including the positive safety stop at the Sixtieth Avenue crosstown street car diamond.

Dandy, hearing no stop signal, suddenly decided to take a chance and run the diamond, thus making up time and giving his front-end witness a thrill. Neither motorman nor conductor, of course, had the slightest idea that their iron pull-rod pin that had worn and broken off from the effort of the last stop at Fifty-fifth.

With a swift glance Dandy saw that the diamond was clear and bore down on it at probably fifty miles per hour, one hand on the whistle cord and the other on the controller.

The conductor, glimpsing the station flash by a window, snatched at the cord above his head and jerked a "stop at once" signal. Dandy ignored the order. He replied with three jaunty whistles that he'd be stopping at the next station, meanwhile hitting the diamond with controller at full juice *What did that crazy con expect*? he thought. *A fellow to stop in his own length*?

Things began to happen then, changing the serenity of a smooth-running and safe carrier of passengers into a panic. The brass trolley-wheel hit the diamond at speed and dislodged, leaping skyward with full force of the heavy spring base. This was too much for the worn retrieving rope. It snapped off short with the jerk.

Free to go high again, the pole struck the next guy wire with the dual force of speed and spring. This ended its career forever as a piece of useful iron. Down it came, broken off at the base, hitting the car roof with a din and clatter. Passengers screamed.

(*Continued on page* 44)

How to Speak and Write Like a College Graduate

"It's easy," says Don Bolander...

"and you don't have to go back to school!"

"Do you avoid the use of certain words even though you know perfectly well what they mean? Have you ever been embarrassed in front of friends or the people you work with, because you pronounced a word incorrectly? Are you sometimes unsure of yourself in a conversation with new acquaintances? Do you have difficulty writing a good letter or putting your true thoughts down on paper?

"If so, then you're a victim of *crippled English,*" says Don Bolander, Director of Career Institute. "Crippled English is a handicap suffered by countless numbers of intelligent, adult men and women. Quite often they are held back in their jobs and their social lives because of their English. And yet, for one reason or another, it is impossible for these people to go back to school."

Is there any way, without going back to school, to overcome this handicap? Don Bolander says, "Yes!" With degrees from the University of Chicago and Northwestern University, Bolander is an authority on adult education. During the past eight years he has helped thousands of men and women stop making mistakes in English, increase their vocabularies, improve their writing, and become interesting conversationalists *right in their own homes.*

BOLANDER TELLS HOW IT CAN BE DONE

During a recent interview, Bolander said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how it can be done.

Question *What is so important about a person's ability to speak and write?*

Answer People judge you by the way you speak and write. Poor English weakens your self-confidence — handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead in business and social life. You can't express your ideas fully or reveal your true personality without a sure command of good English.

Question *What do you mean by a "command of English"?*

Answer A command of English means you can express yourself clearly and easily without fear of embarrassment or making mistakes. It means you can write well, carry on a good conversation — also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

Question *But isn't it necessary for a person to go to school in order to gain a command of good English?*

Answer No, not any more. You can gain the ability to speak and write like a college graduate right in your own home — in only a few minutes each day.

Question *Is this something new?*

Answer Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

Question *Does it really work?*

Answer Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in their business and personal lives.

Question *Who are some of these people?*

Answer Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers and public speakers, housewives, sales people, accountants, foremen, writers, foreign-born citizens, government and military personnel, retired people, and many others.

Question *How long does it take for a person to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

Answer In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

Question *How may a person find out more about the Career Institute Method?*

Answer I will gladly mail a free 32-page booklet to anyone who is interested.

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If you would like a free copy of the 32-page booklet, How to Gain a Command of Good English, *just mail the coupon below. The booklet explains how the Career Institute Method works and how you can gain the ability to speak and write like a college graduate quickly and enjoyably at home. Send the coupon or a post card today. The booklet will be mailed to you promptly.*

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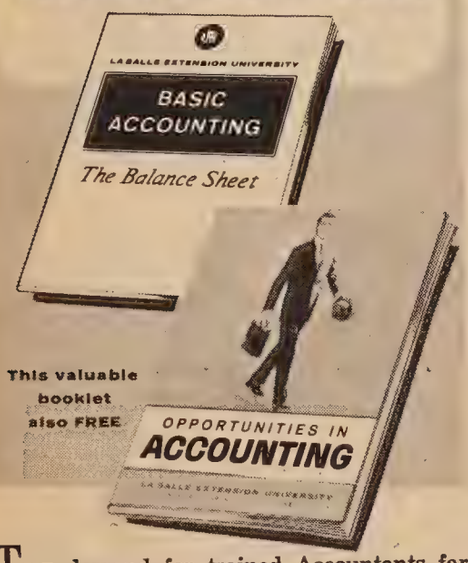

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Dandy got busy with the air, slamming the lever to emergency and bracing himself for the stop.

All these things happened in about a dozen ticks of Dandy's watch. The Squirrel gained speed at every turn of its wheels, unencumbered by the usual obstacles to free wheeling, sans brake and reverse, sans the straight iron tail up behind.

Dandy snapped back the reverse lever. Even as he did, he realized with a sickening heart that there could me no result without direct power to reverse the barrel beneath the car. And to get it he needed trolley contact.

The conductor, in his rising anger, lunged for and pulled the red cord that opened the conductor's valve. But the only result obtained was the noisy crash of air. Not even his frantic tugging at the hand brake on the rear platform had any result.

T. Worthington Russell, now gray of face, leaped to the front hand brake, calling on Tim to help him. Together they tugged at the old brass wheel till the chain came up tight and refused to come further. Yet train No. 101 romped along with all its new-found freedom, straight at Sixty-fifth Avenue, a busy crossing!

The motorman looked up hopelessly, knowing now that the brake rigging had gone. The crossing was right in front, with traffic stringing along. He grabbed the whistled cord and held it down.

Motor vehicles scampered from the danger zone. A builder's light truck cleared, but a long ladder protruding behind it failed to clear by the margin of two feet—enough to smash Dandy's window. When Tim loked across after the crash, Dandy was slowly slumping to the floor, a gash in the side of his head. Tim's eyes traveled sympathetically from the gash to the brass buttons.

And the Squirrel, now around the curve, was romping down the heavier grade at ever-increasing speed. Three miles ahead at the foot of the hill lay the busy single-track. A fatal collision loomed as inevitable.

YES, a wonderful stream is the River of Time. It caught up Tim Martin now and whirled him into action. There was only one thing to do in such emergency, according to the rule of old Alex Minchin. When brakes fail there can be no reverse unless there is direct trolley contact to throw the barrel beneath the car. There was only one trolley left to do this and no one but himself to make the contact. Well, he'd do it—if he could!

Greta had slumped into a terrified stupor on her stool and felt the rush of cool air. She saw Tim clinging from the grab handle at the open front door while the trolley rope was slipping upward through his right hand and his black eyes were staring steadily into the evening sky.

She saw Tim jerk downward and make as if to come inside. But only for an instant. Then she caught the angry whiplash movement of the released rope and in a flash she watched it snap about Tim's arm and jerk him from his hold to disappear. The trolley had fouled a guy wire and with lightning action was torn from its base even as the rear trolley had been at Sixtieth Avenue.

It is then that the River of Time picked up the beautiful girl, Greta, and tossed her into a decision. With Tim heading for destruction before her eyes, she turned to the bleeding, inert form of Dandy in the corner and jerked at his arm. Perhaps the pain roused him. He looked stupidly at her and tried to gain his feet.

Greta pointed at the open front door, screaming: "It's Tim! He's gone!"

It took a moment for Dandy to grasp this. And while he was straining to gather his faculties he heard a new sound above the roaring wheels. It came from underneath the 101, and to the experienced ear could mean but one thing—motors working against momentum. Motors in reverse!

Dandy gripped the controller box and staggered to his feet.

"Good old Tim!" he muttered. "He did it! He did it with the front trolley! Made a flash contact—enough to do the trick! And we called him dumb!"

Then Dandy slumped back into unconsciousness again. A minute later the trolleyless Squirrel ground to a stop a a few yards from Longbridge station.

A GREAT healer of misunderstanding, too, is the River of Time. When it was given out that the telephone girl, Greta Hanson, had deserted her exchange board for the hospital, the office staff thought they understood the reason. They thought, of course, she was standing by Motorman Russell. But Ben Collins suspected differently. Stepping softly into Tim's private ward he overheard this dialog and stopped short.

"I guess they were right, Greta; I'd make a dumb motorman. Couldn't even put up a trolley."

"I guess you did, too, Tim Martin!" a feminine voice flung back indignantly. "You got it close enough to

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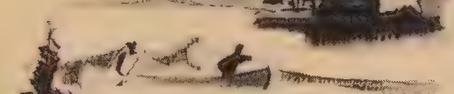

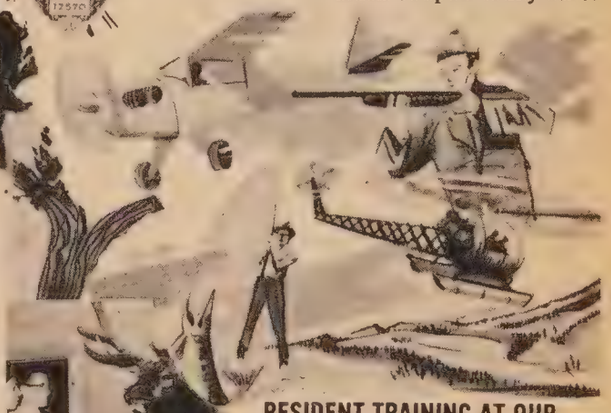

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throw that reverse and stop the car anyway, and that saved us all. Oh, Tim, it was awful, to see you go—but you were wonderful! Even Dandy said so."

"But Mr. Collins says I'm not the type to make a motorman."

Tim's voice trailed off and the girl's took up the talking. "Don't you care, Tim. It doesn't matter. Nothing matters with me except you!"

"Great! You mean—"

Just then Superintendent Collins coughed his way into view. After a few words of greeting he asked the patient:

"How come you did the only thing left there was to do, Martin? Who told you? Russell says he didn't."

Tim grinned weakly, between his bandages. "Alex Minchin," he admitted slowly, wondering if he was getting old Alex in wrong.

"Humph!" the king rumbled, and you could have heard a pin drop. He was studying Greta's blue eyes.

"Some men are like wire," he went on, eventually. "You never know what they're loaded with till they make contact. Listen, Martin, if you're still crazy about brass buttons the Gulf Coast Electric could use a motorman of your type." ●

Union Pacific Roster

Compiled by Sy Reich

Road Nos.	HP	Builder	Model	Whl. Arngt.	Tr. Eff.	Weight	Date	Notes
1-30	8500	GE	8500 GETL	(C-C)÷(C-C)	212,312	?	1958-61	1
51-60	4500	GE	4500 GETL	B-B-B-B	137,930	551,720	1953-4	1, 2
61-75	4500	GE	4500 GETL	B-B-B-B	137,930	551,720	1953-4	1, 2
80	7000	UP	———	(A1A-A1A)÷(2-D+D-2)	?	?	1962	3
100-129	1500	GM-EMD	GP7	B-B	62,300	249,200	1953	4
130-349	1750	GM-EMD	GP9	B-B	61,640	246,560	1954, 7	5
130B-204B, 300B-349B	1750	GM-EMD	GP9B	B-B	61,095	244,380	1954, 7	6
400-429	2400	GM-EMD	SD24	C-C	96,490	385,970	1959	
400B-444B	2400	GM-EMD	SD24B	C-C	96,490	383,450	1959	
445-448	2400	GM-EMD	SD24	C-C	?	?	1960, 58	7
450-459	1500	GM-EMD	SD7	C-C	90,805	363,220	1953	9
470-499	2000	GM-EMD	GP20	B-B	?	?	1960	8
500-540	1750	GM-EMD	F9A	B-B	?	?	1958	76
500B-542B	1750	GM-EMD	F9B	B-B	?	?	1958	75
600-607	2000	Alco-GE	PA-2	A1A-A1A	59,490	355,970	1947, 9	3, 22
600B, 602B, 604B-607B	2000	Alco-GE	PB-2	A1A-A1A	58,525	349,870	1947, 9	23
620-621	2000	GE	———	B-B	?	?	1954	68
620B-621B	2000	GE	———	B-B	?	?	1954	69
625-640	2500	GE	U25B	B-B	?	?	1961-2	11
650-657	2000	FM	ALT 100.3	A1A-A1A	62,230	357,720	1945-8	24
650B, 652B-654B, 656B	2000	FM	ALT 100.3	A1A-A1A	61,730	353,235	1945-8	25
675-678	2400	Alco Pr.	RS-27	B-B	?	?	1959-60	12
700-735	2250	GM-EMD	GP30	B-B	?	?	1963	70
700B-739B	2250	GM-EMD	GP30B	B-B	?	?	1963	70
800-874	2250	GM-EMD	GP30	B-B	?	?	1962	
875	2250	GM-EMD	GP30	B-B	?	?	1961	10
1000-1095	1000	GM-EMD	NW2	B-B	62,760	251,040	1939-48	18
1100-1153	1000	Alco-GE	S2	B-B	57,500	230,000	1943-6	19
1154-1198	1000	Alco Pr.	S4	B-B	61,910	247,650	1955-6	
1200-1205	1000	Baldwin	VO 1000	B-B	60,175	240,700	1943-4	20
1206-1210	1000	BW	DS 4-4-1000	B-B	57,400	229,600	1948	
1211-1222	1000	Alco-GE	RS-1	B-B	72,400	240,000	1949, 53	13
1250	1500	BW	DRS 6-4-1500	A1A-A1A	47,170	283,000	1946	16
1260-1265	1600	BLHW	AS-616	C-C	81,690	326,760	1951-2	
1270	1200	Alco-GE	RS-1	B-B	?	?	1943	14
1280-1290	1500	Alco-GE	RSC-2	A1A-A1A	39,150	235,000	1947-8	15
1291-1295	1500	Alco-GE	FS-2	B-B	62,500	250,000	1947-9	71
1300-1304	1000	FM	ALT 100.6A	B-B	61,000	244,000	1945, 7	
1325-1329	1500	FM	ALT 200.2A	B-B	60,520	242,090	1948	
1340-1342	1600	FM	H16-44	B-B	62,020	248,070	1950	
1360-1370	2000	FM	ALT 200.1	B-B	63,520	254,090	1947	17
1399	380	GE	44 ton	B-B	22,150	88,600	1947	21
1400A-1441A	1500	GM-EMD	F3A	B-B	61,850	247,400	1947-8	52, 70, 79
1442B-1471B	1500	GM-EMD	F3B	B-B	61,817	247,270	1947-8	62, 70, 79

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City ..... Zone ..... State .....

Profits That Lie Hidden in America's Mountain of Broken Electrical Appliances

By J. M. Smith *President, National Radio Institute*

And I mean profits for you — no matter who you are, where you live, or what you are doing now. Do you realize that there are over 400 million electrical appliances in the homes of America today? So it's no wonder that men who know how to service them properly are making $3 to $5 an hour — in spare time or full time! I'd like to send you a Free Book telling how you can quickly and easily get into this profitable field.

THE COMING OF THE AUTO created a multi-million dollar service industry, the auto repair business. Now the same thing is happening in the electrical appliance field. But with this important difference: anybody with a few simple tools can get started in appliance repair work. No big investment or expensive equipment is needed.

The appliance repair business is booming — because the *sale* of appliances is booming. One thing naturally follows the other. In addition to the 400,000,000 appliances *already* sold, this year alone will see sales of 76 million *new* appliances. For example, 4,750,000 new coffee makers, almost 2,000,000 new room air conditioners, 1,425,000 new clothes dryers. A nice steady income awaits the man who can service appliances like these. And I want to tell you why that man can be *you* — even if you don't know a volt from an ampere now.

A Few Examples of What I Mean

Now here's a report from Earl Reid, of Thompson, Ohio: "In one month I took in approximately $648 of which $510 was clear. I work only part time." And, to take a big jump out to California, here's one from J. G. Stinson, of Long Beach: "I have opened up a small repair shop. At present I am operating the shop on a spare time basis — but the way business is growing it will be a very short time before I will devote my full time to it."

Don't worry about how little you may now know about repair work. What John D. Pettis, of Bradley, Illinois wrote to me is this: "I had practically no knowledge of any kind of repair work. Now I am busy almost all my spare time and my day off — and have more and more repair work coming in all along. I have my shop in my basement."

We Tell You Everything You Need to Know

If you'd like to get started in this fascinating, profitable, rapidly growing field — let us give you the home training you need. Here's an excellent opportunity to build up "a business of your own" without big investment — open up an appliance repair shop, become independent. Or you may prefer to keep your present job, turn your spare time into extra money.

You can handle this work anywhere — in a corner of your basement or garage, even on your kitchen table. No technical experience, or higher education is necessary. We'll train you at home, in your spare time, using methods proven successful for over 45 years. We start from scratch — *tell* you in plain English, and *show* you in clear pictures — everything you need to know. And, you will be glad to know, your training will cost you less than 20¢ a day.

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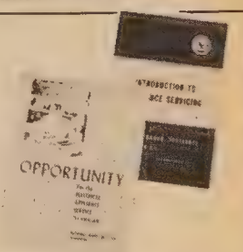

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UP Roster Notes

Roster is based on data from GE Publicist, C&NW Gen. Supt. Motive Power, UP Vice Pres.-Operations, FM Administrative Sales Engineer, and SP Chief Mechanical Officer, System, and is accurate as of July 3, 1963.

Abbreviations used: GE—General Electric; UP—Union Pacific; GM-EMD—General Motors-Electro Motive Div.; GM-EMC—General Motors—Electro Motive Corp.; Alco-GE—American Locomotive Co.—General Electric; FM—Fairbanks-Morse; Alco Pr.—Alco Products; BW—Baldwin-Westinghouse; BLHW—Baldwin-Lima-Hamilton-Westinghouse; EMC—Electro Motive Corp.; renum.—renumbered.

(1) Oilburning gas turbine.
(2) 51-57 scrapped.
(3) Coalburning gas turbine. Control unit ex PA-2 number 607. Turbine ex Great Northern 5018.
(4) Originally 700-729, renumbered 100-129 in 1953.
(5) Originally 204, renum. 249 in 1955 or 1956. Units 245-249 are Camas Prairie units; 261, 281, 300-302, 305, 311, 313-315, 320, 324 are turbo-charged to 2000 hp. model GP9 (MOD).
(6) 185B, 300B, 301B, 308B, 323B, 324B, 345B, 348B are turbo-charged to 2000 hp. model GP9B (MOD).
(7) 445-447 ex EMD demonstrators 7200-7202, delivered in 1961. Unit 448 is ex EMD demonstrator 5579, delivered in 1962.
(8) Originally 700-729, renumbered 470-499 in 1963.
(9) Original 775-784, renumbered 450-459 in 1963.
(10) Originally EMD demonstrator 5629, model GP22, built 1961; rebuilt to GP30 in '62; sold to UP in 1962, renum. 875.
(11) UP 633-636 ex GE demonstrators 2501, 2503, 2502, 2504.
(12) UP 675-678 ex Alco Prod. demonstrators 640-2, 640-3, 640-4, 640-5, delivered in 1961.
(13) Leased from Spokane International, ex 200-211.
(14) Originally Bamberger 570, rebuilt to 1200 hp. by GM-EMD in '51, delivered to UP in '59.
(15) Originally 1180-1190, renum. 1280-1290 in '55. Unit 1190 originally was Alco-GE demonstrator 1190.
(16) Originally BW demonstrator 1500, delivered to UP in '48; scrapped.
(17) UP 1366 ex FM demonstrator FM 2000. Units 1361-1363, 1366, 1369 retired and for sale.
(18) UP 1000 ex EMD demonstrator 889.
(19) 1100-1118 ex 1036-1054.
(20) 1200-1205 ex 1060, 1059, 1058, 1057, 1056, 1055; scrapped.
(21) Was GE demonstrator 1399, now UP shop loco 903999.

1442-1450	1500	GM-EMD	F3A	B-B	?	?	1948	53, 70, 79
1451-1463 (1st)	1500	GM-EMD	F3A	B-B	?	?	1948	54, 70, 79
1451-1461 (2nd)	1500	GM-EMD	F3A	B-B	?	?	1947-8	70, 77, 79
1464-1465	1500	GM-EMD	F3A	B-B	?	?	1948	54, 70, 79
1466-1483	1500	GM-EMD	F7A	B-B	62,180	248,740	1950-2	55, 70
1498-1499	1500	GM-EMD	FP7A	B-B	63,782	255,130	1952	56
1430B, C-1450B, C even only	1500	GM-EMD	F3B	B-B	?	?	1948	63, 70, 79
1452B, C-1458B, C (1st) even only	1500	GM-EMD	F3B	B-B	?	?	1948	64, 70, 79
1451B, C-1458B, C (2nd)	1500	GM-EMD	F3B	B-B	?	?	1947-8	70, 78, 79
1464B, C	1500	GM-EMD	F3B	B-B	?	?	1948	62, 65, 70, 79
1466B, C-1498B, C even only	1500	GM-EMD	F7B	B-B	61,890	247,560	1951-2	66, 70
1500-1512	1500	GM-EMD	F3A	B-B	?	?	1948	54, 79
1513-1526	1500	GM-EMD	F3A	B-B	46,250	?	1947-8	52, 79
1527-1528	1500	GM-EMD	F3A	B-B	?	?	1948	53, 79
1550-1563	1500	GM-EMD	F3A	B-B	?	?	1948-9	73, 79
1500B, C-1508B, C even only	1500	GM-EMD	F3B	B-B	?	?	1948	63, 79
1510B, C-1516B, C even only	1500	GM-EMD	F3B	B-B	?	?	1948	64, 79
1518B, C-1528B, C even only	1500	GM-EMD	F3B	B-B	?	?	1947-8	62, 79
1550B, C-1562B, C even only	1500	GM-EMD	F3B	B-B	?	?	1948-9	74, 79
1500A-1523A, 1542A, 1543A	1500	Alco-GE	FA-1	B-B	60,425	241,700	1947-8	61
1524B-1541B	1500	Alco-GE	FB-1	B-B	58,700	234,840	1947-8	67
1626-1643	1500	Alco-GE	FA-1	B-B	60,425	241,700	1948	
1618B, C-1642B, C even only	1500	Alco-GE	FB-1	B-B	58,700	234,840	1948	
1800-1824	1200	GM-EMD	SW7	B-B	61,485	245,940	1950	
1825-1866	1200	GM-EMD	SW9	B-B	?	?	1953	
1870-1877, 1870B-1877B	2400	GM-EMD	TR5	(B-B)x(B-B)	123,680	494,720	1951	

Pre-1939 Passenger Units

Original Nos.	Renumbered	HP	Builder	Model	Whl. Arngt.	Tr. Eff.	Weight	Date	Note's
M10000	———	600	Pullman-EMC	———	B-2	14,200	169,320	1934	72
M10001	CD-07-C	900	GM-EMC-Pullman	A	B-B	25,000	216,120	1935	49
M10002A, M10002B	———	2100	GM-EMC-Pullman	A,B	(B-B)+(B-B)	92,515	360,060	1936	50
M10003A-M10007A, M10003B-M10007B	CD-07-A, CD-06-C, CD-05-A, CD-06-C, CD-07-B, CD-05-C, CD-05-B, CD-06-B	2400	GM-EMC-Pullman	A,B	(B-B)+(B-B)	58,400	429,000	1936	48
LA-5, LA-6 (1st)	5-M-1A, 5-M-2A	2000	GM-EMC	E3A, E3B	A1A-A1A	52,000	308,500	1939	

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At last... even in your spare time... you can start a business that makes money fast... so fast it can put you in a 1964 car of your choice in one short month! Here's how: At our expense, we'll set you up in a profitable Mason "Shoe Store" business. You need no previous experience... don't invest a dime! James Kelly tried our offer and made $93.55 in just one evening's friendly work! Yes, everyone wants exciting, Nationally Advertised Mason Shoes. That's why you pocket steady cash profits, enjoy easy repeat sales, *big* money... *plus* monthly bonus checks and rich prizes!

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You'll offer over 230 styles for men and women... featuring foamy soft *air-cushion* innersoles... every shoe so comfortable they almost sell themselves for dress, work, sport wear. You'll have no problem fitting people, because you draw on our stock of over 250,000 pairs... sizes from 2½ to 15, widths from AAAA to EEEE. Your customers are delighted. Remember, Mason Shoes aren't sold by stores... folks must buy these Nationally Advertised Shoes from you.

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What's more, you can get your own shoes FREE—your family's shoes at discount prices... win big extra bonuses and valuable FREE prizes—appliances, sporting goods, even a new car—get life, accident, hospital insurance plus payments up to $100 a week when unable to work—all at no cost to you. You never invest 1¢. Rush coupon below for FREE Starting Outfit and all sales helps.

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Pre-1948 Passenger Units

Numbers till 1946	Nos. in 1946-'8	Renum. in '48	HP	Builder	Model	Wheel Arrang't	Tract. Effort	Weight	Date	Notes
SF-1	901A	983J	1800	GM-EMC	E2AA	A1A-A1A	44,400	307,680	1937	26, 80
SF-2, SF-3	902B-903B	983BJ-983CJ	1800	GM-EMC	E2B	A1A-A1A	44,400	310,860	1937	26
SF-4	904A	985J	2000	GM-EMD	E6A	A1A-A1A	52,000	315,700	1941	26
SF-5, SF-6	905B-906B	985BJ, 985CJ	2000	GM-EMD	E6B	A1A-A1A	52,000	314,500	1941	26
———	907A	986J	2000	GM-EMD	E7A	A1A-A1A	?	?	1946	26
———	908B-909B	986BJ, 986CJ	2000	GM-EMD	E7B	A1A-A1A	?	?	1946	35
LA-1	921A	984J	1800	GM-EMC	E2A	A1A-A1A	44,400	317,580	1937	28
LA-2, LA-3	922B-923B	984BJ, 984CJ	1800	GM-EMC	E2B	A1A-A1A	44,400	313,940	1937	29
LA-4	924A	987J	2000	GM-EMD	E6A	A1A-A1A	52,000	318,930	1941	29
LA-5, LA-6 (2nd)	925B-926B	987BJ, 987CJ	2000	GM-EMD	E6B	A1A-A1A	52,000	314,160	1941	29
———	927A	988J	2000	GM-EMD	E7A	A1A-A1A	?	?	1946	29
———	928B-929B	988BJ, 990BJ	2000	GM-EMD	E7B	A1A-A1A	?	?	1946	29
———	930A-931A	989J-990J	2000	GM-EMD	E7A	A1A-A1A	?	?	1946	29
5-M-1A	951A	991	2000	GM-EMC	E3A	A1A-A1A	52,000	308,500	1939	
5-M-2A	952B	992B	2000	GM-EMC	E3B	A1A-A1A	52,000	305,000	1939	
7-M-1A, 7-M-2A, 8-M-1A, 8-M-2A, 9-M-1A, 9-M-2A	953A-958A	992-997	2000	GM-EMD	E6A	A1A-A1A	52,000	314,000	1940	
———	959A-960A	998-999	2000	GM-EMD	E7A	A1A-A1A	?	?	1946	
———	961B-963B	994B-998B even only	2000	GM-EMD	E7B	A1A-A1A	?	?	1946	
———	964A-968A	900-904	1500	GM-EMD	F3A	B-B	?	?	1947	57
———	969B-975B	900B, C-902B, C, 903B	1500	GM-EMD	F3B	B-B	?	?	1947	58
50-M-1A, 50-M-2A	981A-982A	700-701	2000	FM	ALT 100.3	A1A-A1A	62,230	357,720	1945-8	24
50-M-3B	983B	700B	2000	FM	ALT 100.3	A1A-A1A	61,730	353,235	1945-8	25
———	984A-985A	702-703	2000	FM	ALT 100.3	A1A-A1A	62,230	357,720	1945-8	24
———	986B-987B	702B-703B	2000	FM	ALT 100.3	A1A-A1A	61,730	353,235	1945-8	25
———	988-991	704-707	2000	FM	ALT 100.3	A1A-A1A	62,230	357,720	1945-8	24
———	992B-993B	704B, 706B	2000	FM	ALT 100.3	A1A-A1A	61,730	353,235	1945-8	25
———	994-997	600-603	2000	Alco-GE	PA-2	A1A-A1A	59,490	355,970	1947	22
———	998B-999B	600B, 602B	2000	Alco-GE	PB-2	A1A-A1A	58,525	349,870	1947	23

Passenger Unit Activities from 1948 to Rebuilding

Early 1948 Nos.	Post 1948 Nos.	Disposition	Renumbered	Rebuilt to	Model	Notes
900-904	900-904	———	1451-1455	———	F3A	57
———	905-910	———	1456-1461	———	F3A	59
900B, C-902B, C, 903B	900B, C-902B, C, 903B	———	1451B, C-1453B, C, 1454B	———	F3B	58
———	905B, C-909B, C	———	1456B, C-1458B, C	———	F3B	60
———	910B, C	———	1498B, C	———	F7B	66, 70
———	911-912	———	1498-1499	———	FP7A	56
983J	———	SP 6011A	———	———	E2AA	26, 80
983BJ, 983CJ	983B, 983C	———	———	E8B 922B-923B	E2B	26
984J	———	C&NW 5003A	———	———	E2A	28
984BJ, 984CJ	984B, 984C	———	———	E8B 924B-925B	E2B	29
985J	———	C&NW 5004A	———	———	E6A	26, 81
985BJ, 985CJ	985B, 985C	———	———	E9B 900B-901B	E6B	26
986J	986	Sold to EMD	———	———	E7A	26

(22) 600-603 ex 994-997.
(23) 600B, 602B ex 998B, 999B.
(24) Cab units. Originally 650-651 were numbered 50-M-1A and 50-M-2A renum. 981A-982A, then 981-982, then 700-701, then 650-651. Units 652-657 originally numbered 984, 985, 988, 989, 990, 991, then renum. 702-707, then 652-657. All units scrapped in '61.
(25) Booster units. Originally 650B was 50-M-3B, then 983B, then 700B, then 650B. Units 652B-654B, 656B were originally 986B-987B, 992B-993B, then 702B-704B, 706B, then 652B-654B, 656B. All units scrapped in '61.
(26) Originally jointly owned by UP, SP, C&NW.
(28) Originally jointly owned by UP and C&NW; scrapped.
(29) Originally jointly owned by UP, C&NW.
(35) Originally owned by UP, SP, C&NW.
(44) UP 988 ex GM-EMD 765, "Train of Tomorrow" loco.
(45) UP 925 originally C&NW E7A 5007B, built in '45, purchased from C&NW by UP and rebuilt by GM-EMD to E8A in '52.
(46) 945 rebuilt by GM-EMD in '55.
(47) 955B, 961B rebuilt by GM-EMD in '55.
(48) Unit M10004A rebuilt to model B.
(49) Rebuilt to 1200 hp. model A in '36, then to model B in '39.
(50) Sold in 1948.
(52) Renum. 1400-1441 in '48. Unit 1435 scrapped. Units 1513-1526 renum. from 1431, 1400, 1422, 1408, 1406, 1411, 1412, 1414-1416, 1423, 1424, 1436, 1440 when regeared. Units 1513-1526 rebuilt by GM-EMD to F9A in '58, renum. 510, 502, 505, 540, 507, 518, 539, 527, 534, 522, 526, 521, 500, 529, respectively.
(53) 1442-1443 renum. 1527-1528 when regeared. 1527-1528 rebuilt by GM-EMD to F9A in '58, renum. 504, 519.
(54) Units 1500-1512 renum. from 1462, 1463, 1461-1451. 1500-1503, 1505-1512 rebuilt by GM-EMD to F9A in '58, renum. 509, 523, 531, 520, 524, 536, 530, 511, 517, 503, 514, 528. Unit 1504 regeared, renum. 1464.
(55) 1464-1465 rebuilt. 1483, ex EMD demonstrator 1483, built in 1950, acquired by UP in '53. Unit 1466 rebuilt.
(56) Ex UP 911-912.
(57) Renum. 900-904 in '48, then 1451-1455 in '55.
(58) Renum. 900B, C-902B, C, 903B in '48, then 1451B, C-1453B, C, 1454B in '55.
(59) Renum. 1456-1461 in '55.
(60) Renum. 1456B, C-1458B, C in '55.
(61) Renum. 1600-1625.
(62) Renum. 1400B, C-1428B, C even only, in '48. Units 1518B, C-1528B, C even only, 1530B ex 1428B, 1426C, 1426B, 1424C, 1424B, 1422B, 1420B,

U.S. GOV'T SURPLUS

SELLING FOR ONLY A FRACTION OF ORIGINAL COST!

THOUSANDS OF ITEMS AVAILABLE FOR ONLY 2c AND 3c ON THE DOLLAR, DIRECT FROM GOVERNMENT

EXAMPLES:
Jeeps $117.00
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and thousands more!
PLUS a list of 1000 locations where you can purchase surplus on the spot!
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Separate 52-page section with *pictures and prices* of more than **600** items you can order ***DIRECT BY MAIL*** is yours free when you send $1.00 for the surplus catalog. Examples:

Parachutes	Ammunition	Boats
Walkie-Talkies	Holsters	Silverware
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Battle Hats	Boots	and
Guns	Combat Knives	*Hundreds*
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Surplus Bargains, Dept. SG-3
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I enclose $1.00. Send both catalogs immediately. I understand that my money will be refunded if I am not completely satisfied. Also I will receive a full refund with my first order of $10.00 or more.

Name _____
(Please Print)
Address _____
City _____ State _____

FULL PURCHASE PRICE OF $1.00 REFUNDED WITH FIRST ORDER OF $10.00 OR MORE

YOU TOO CAN MAKE $1,000 EVERY MONTH!

ALFRED W. WALTER, Florida

HOW THIS COUPON LED TO $6,345 BUSINESS IN LESS THAN 2 MONTHS!

Read this Secret of Selling, Then CASH IN FOR YOURSELF

Alfred W. Walter mailed this coupon. In *Less than 2 months*, he reordered over 500 dozen units of VX-6, made more money in a month than many men make in a year. Without any knowledge or experience in cars, his FREE palm-sized Electrical Demonstration Unit closed sales in 30 seconds flat.

Proved In His Own Oldsmobile

"I tried VX-6 first in my own Oldsmobile. Results were so amazing that I ordered a trial shipment of 3 dozen units, started selling friends, then found that it was just as easy to sell volume users such as farmers, taxis, used car dealers, local governments, boat owners, service stations, department stores and industrial users.

"My palm-sized Electronic Demonstrator does my selling for me. The most fantastic, convincing selling device I have ever seen — easily worth $20,000 a year to me in sales and profits."

NASCAR Champion
LEE PETTY

Lee Petty, racing champion and winner of Daytona "500 Mile" uses VX-6 in his racing cars, personal car and even in his farm equipment "I wouldn't drive without VX-6, and I'm glad to testify to this fact to the motorists of America."

LABORATORY TESTED

MORE THAN 3,000,000 ALREADY SOLD

to various departments and divisions of

- U. S. Government and The Armed Forces
- A & P, Canada Dry, Chrysler Corp., Coca Cola, General Electric, General Mills, General Motors, National Dairy, Pan-American Airways and thousands of other business firms
- AND OVER 3 MILLION PRIVATE DRIVERS!

FREE SALES KIT

NO EXPERIENCE NEEDED

Every car of any kind, any year, model or condition needs VX-6 protection. One application is all that is needed for the life of the car, and immediately old batteries spring back to life. Even new batteries are kept free of sulphation so that they start at their peak of performance always. Sell friends, neighbors, delivery trucks, fleet cabs, company cars and local governments. A single call can mean multiple sales that pay off in hundreds of dollars.

Sales Guaranteed or Money Refunded

Yes, this is the offer that National Dynamics makes you! Send coupon below for the free, complete VX-6 Sales Kit, big earnings plan, illustrated literature—everything you need to get started at once making good money in your area PLUS INFORMATION ON HOW TO GET YOUR FREE ELECTRONIC DEMONSTRATOR.

64 Million Reasons Why You Should Answer This Ad

There are over 67 million cars on the road. Over 3 million already use VX-6, leaving you a fantastic and responsive market. One application at only $2.98 is all that is needed for the life of the car.

Your story is as simple as that, and these facts are something that can't be resisted by any motorist with a battery in his car and a brain in his head.

FREE! *Scientific* NEW *Electronic* DEMONSTRATOR!

Engineered exclusively by National Dynamics, this mighty midget sales-maker nestles in the palm of your hand . . . works a small miracle before the prospect's eyes! Put the prongs in any glass of water . . . nothing will happen! Then add VX-6 (instantly creating electronic conductivity through the water.) THE BULB LIGHTS UP, yet water remains safe enough to drink!

IN JUST 30 SECONDS

you have presented PROOF POSITIVE that VX-6 WORKS . . . yet it WILL NOT HARM battery! You get this palm-size wonder-worker FREE with your first order!

When The Bulb Lights, The Sale Is Made!

SEEING IS BELIEVING

"Yes, one actual demonstration beats a mouth-ful of words." You can PROVE how VX-6 works, right before your very eyes. If your battery won't even hold a charge, put one unit of VX-6 into it as directed, THEN TORTURE TEST the battery like this. Turn on lights, step on starter, BUT DO NOT TURN ON IGNITION.

Run the battery down completely until it is so weak the lights barely glow. Now turn off the light switch. Wait 3 minutes. Switch on the ignition and turn (or step) on the starter. The battery with VX-6 in it will start the car with a surge of power IT REGAINED IN THOSE FEW MINUTES.

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MONEY-BACK GUARANTEE

THEY'RE DOING IT EVERY DAY

Carl Roberts, California	$265	Every Month Part Time
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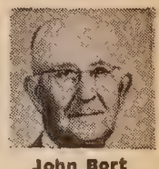
Peter Janzen, Illinois	$2,955.84	6 Mos. Part Time Selling This Year
C. Strombuck, Ohio	$1,659.52	3 Months Part Time

Carl Roberts
Calif



John Bort
Idaho

NATIONAL DYNAMICS, Dept. AMG-3
23 West 47 Street, New York 36, N.Y.

Send me free information on how to get started making big money with VX-6 right away, plus the NEW 1961 National Dynamics Sales Kit.

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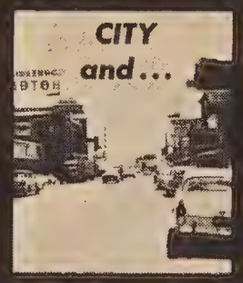
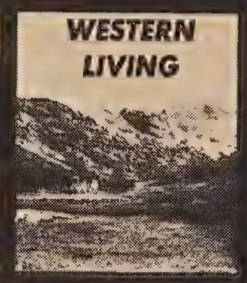
NOW... Start Enjoying "THE BEST of TWO WORLDS"

2½ ACRES

JUST 1½ MILES from ELKO, NEVADA





$1 DOWN / $10 PER MONTH / FULL PRICE NO INTEREST $595.00 NO CARRYING CHARGES

MEADOW VALLEY RANCHOS

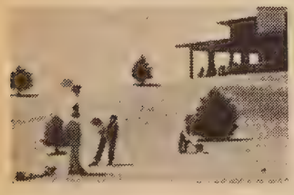
BOOMING NEVADA IS EQUALED BY ONLY A FEW PLACES IN THE WORLD. Population has surged Westward in ever increasing numbers. Westward to Nevada, where the air is fresh and clear, taxes are low or non-existent and opportunity is open to all. Yes, Nevada is booming and real estate investors are prospering. **It is a proven fact that many purchasers of Nevada acreage have realized fabulous profits from small investments.** Now, a NEW Nevada Real Estate Opportunity exists for you. This Ground Floor Opportunity is **MEADOW VALLEY RANCHOS, located only 1½ miles from the thriving city of Elko, Nevada.**

THE VERY BEST FEATURES OF TWO WORLDS

... THE WORLD OF THE WEST: Located in prosperous Elko County, the ranchos have the backdrop of the majestic Ruby Mountains. **The sparkling Humboldt River is a short ½ mile away. Every Rancho fronts on a graded road that leads into coast to coast U.S. Highway 40.** Amidst these spectacular surroundings MEADOW VALLEY RANCHO owners can relax and enjoy the wonderful life of the Golden West.

... THE WORLD OF CITY CONVENIENCES: The bustling city of Elko with its modern schools, shops, theaters, hospital and airport is only 1½ miles away. New homes, with FHA financing committments issued, are now under construction ... less than 1 mile from the property. The Experienced, Successful Developers of MEADOW VALLEY RANCHOS are not offering remote land where purchasers have to hope for progress and expansion. They offer you the opportunity of a life time, a chance to participate in Nevada's continuing boom ... Minutes from the conveniences of hospitable Elko, in the midst of current growth and progress, **MEADOW VALLEY RANCHOS has all the necessary ingredients to skyrocket in value!**

RECREATION UNLIMITED:

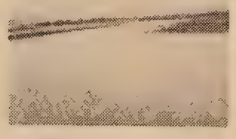


GOLF: A mere one mile from MEADOW VALLEY RANCHOS is the Ruby View Golf Course. No rush for starting times on this city owned and maintained golf course, but golfing as it should be enjoyed. Play a leisurely 9-18 or 36 holes surrounded by breathtaking scenery, minutes from your rancho.

HUNTING: Hunters from all corners of the globe come to Elko County to hunt the big game species Mule Deer ... Quail, Chukar, and Partridge are found in abundance.

FISHING: In jewel like lakes, and mountain fed bottom streams you'll catch trophy size German Browns, Rainbow and Brook Trout .. large mouth fighting Bass. RANCHO owners can catch their dinner within easy driving distance of the property lines.

YOUR OWN LAKE . . . You, and your invited guests will spend many happy hours boating, fishing and picnicking at nearby Lake Osino. There is no charge to Rancho owners for full rights to the use of this private multi-acre lake and park area.



PROVEN OPPORTUNITY: Yes, individuals are taking advantage of Nevada opportunity. But the country's leading corporations are also investing in their Nevada futures. Industrial giants, who erect plants where increasing land values and population demand them, are building or have secured acreage throughout Nevada.

LOW OR NON-EXISTENT TAXES: As a result of Nevada's low realistic tax structure, Profits And Wages Are Kept; not paid out to the state. NEVADA HAS NO STATE INCOME, INHERITANCE, CORPORATION OR GIFT TAX. The low real property tax is definitely limited by the state constitution. YES, NEVADA IS ONE OF OUR LAST FRONTIERS OF TAX FREEDOM!

TOTAL COSTS: The full price of the title to your **2½ acre Rancho is only $595.00.** Complete payment schedule is **$1.00 down and $10.00 per month.** No interest, no carrying charges. Live, Vacation or Retire on your land, or simply hold for investment security. Wise men like Andrew Carnegie said, "More money has been made in Real Estate than in all industrial investments combined." **Make MEADOW VALLEY RANCHOS' PROSPEROUS FUTURE — YOUR FUTURE. DON'T MISS THIS GOLDEN OPPORTUNITY!**

MEADOW VALLEY RANCHOS
2191 STOCKMEN BLDG.
ELKO, NEVADA

MEADOW VALLEY RANCHOS — **MAIL COUPON TODAY**
2191 Stockmen Bldg., Elko, Nevada

Yes! — Reserve acreage at MEADOW VALLEY RANCHOS for me — 2½ acre parcel, $595 — payable $1 down, and $10 a month — no interest no carrying charges. Send purchase contract and map showing exact location of my holding. You will return my deposit if I request same within 30 days. I enclose deposit for each 2½ acre rancho desired.

SIZE ACRES	DOWN	PER MO.
2½	$1	$10
5	2	15
7½	3	20
10	4	25

Name:_____

Address_____

City:_____ Zone:_____ State:_____

Indicate No. of Ranchos ____ Total enclosed $____

By throwing the isolation switch on trailing unit of UP diesel transfer, engineer cuts out that unit. He can isolate a lead unit from his cab and reply on the trailing unit for 1200 hp and he can still maintain control. Union Pacific Railroad

C, 1418B, 1404C, 1406B, C, 1414B, 1518B. C-1528B, C even only, rebuilt by GM-EMD to F9B in '58 and renum. 519B, 508B, 533B, 530B, 529B, 523B, 513B, 504B, 500B, 503B, 517B, 516B. Unit 1530B renum. 1464B in '52. Unit 1464B rebuilt; 1422C scrapped.

(63) 1500B, C-1508B, C even only formed from 1442B, C-1450B, C even only. 1500B, C-1508B, C even only, rebuilt by GM-EMD to F9B in '58, and renum. 520B, 525B, 505B, 524B, 522B, 526B, 510B, 518B, 527B, 541B.

(64) 1510B, C-1516B, C even only, formed from units 1452B, C-1458B, C even only. 1510B, C-1516B, C rebuilt to F9B by GM-EMD in '58, renum. 506B, 539B, 538B, 512B, 540B, 537B, 501B, 536B.

(65) 1464C ex 1558C. 1464C rebuilt.

(66) 1466B, C rebuilt by GE-EMD in '52. Unit 1498B, C ex UP 910B, C.

(67) Renum. 1600B, C-1616B, C even only.

(68) Ex GE demonstrators 750A, D tested on Erie RR. Acquired by UP in '59, renum. 620-621.

(69) Ex GE demonstrators 750B, C tested on Erie RR. Acquired by UP in '59, renum. 620B-621B.

(70) The following units have been traded in for GP30's: 1400B, 1401, 1402, 1404, 1405, 1409, 1410B, 1412B, 1413, 1413C, 1416B, 1416C, 1418, 1418C, 1419, 1421, 1428C, 1430, 1432B, 1434, 1434B, and 1434C, 1436C, 1437, 1439, 1440C, 1444, 1446, 1447, 1451B, 1452, 1454, 1455, 1456, 1456B, 1456C, 1452B, 1457, 1457B, 1457C, 1458, 1458B, 1458C, 1460, 1461, 1464, 1464B, 1464C, 1456, 1466, 1466B, 1468C, 1472, 1472B, 1474B, 1475, 1476B, 1477, 1478, 1478B, 1479, 1480, 1480B, 1480C, 1481, 1482, 1482C, 1484B, 1484C, 1486B, 1490B, 1490C, 1494B, 1496B, 1496C.

(71) Originally 1191-1195.

(72) Remodeled in '36; scrapped.

(73) Unit 1553 renum. 1465. Units 1550-1552, 1554-1563 rebuilt to F9A by GM-EMD in '58, renum. 535, 512, 506, 516, 533, 532, 508, 537, 513, 525, 515, 501, 538.

(74) Unit 1558C renum. 1464C. Units 1550B, C-1556B, C even only, 1558B, 1560B, C, 1562B, C rebuilt by GM-EMD in '58, renum. 509B, 514B, 532B, 531B, 511B, 542B, 507B, 515B, 521B, 528B, 535B, 502B, 534B.

(75) Units 500B-542B rebuilt from 1526B, 1516B, 1562B, 1526C, 1524C, 1502B, 1510B, 1556B, 1518C, 1550B, 1506B, 1554B, 1512C, 1524B, 1550C, 1556B, 1528C, 1528B, 1506C, 1518B, 1500B, 1558B, 1504B, 1522C, 1502C, 1500C, 1504C, 1508B, 1560B, 1522B, 1520C, 1552C, 1552B, 1520B, 1562C, 1560C, 1516C, 1514C, 1512B, 1510C, 1514B, 1508C, 1554C.

(76) Units 500-540 rebuilt from 1525, 1562, 1514, 1510, 1527, 1515, 1552, 1517, 1557, 1500, 1513, 1508, 1551, 1559, 1511, 1561, 1554, 1509, 1518, 1528, 1503, 1524, 1522, 1501, 1505, 1560, 1523, 1520, 1512, 1526, 1507, 1502, 1556, and 1555, 1521, 1550, 1506, 1558, 1563, 1519, 1516. Unit 525 not in service.

(77, 78) These units are ex something.

(79) Rebuilt to F7 ratings.

(80) Sold to SP, renum. 6011A, then 6017. (81) Scrapped. ●

Sun sets on Union Pacific streamliner *City of Denver* eastbound in Colo. Photo made in 1951; equipment of entire train shown here was scrapped 2 years later.
D.C. Wornom, 454 Riverside, N.Y. City

986BJ, 986CJ	———	SP 6011B, C	———	———	E7B	35
987J	987	———	———	E9A 900	E6A	29
987BJ, 987CJ	987B-987C	———	———	E9B 902B-903B	E6B	29
988J	———	C&NW 5004B	———	———	E7A	29, 81
989J-990J	989-990	———	———	———	E7A	29
988BJ	988B	———	———	———	E7B	29
990BJ	990B	Sold to EMD	———	———	E7B	29
991	991	———	———	E9A 901	E3A	
992B	992B	———	———	E9B 904B	E3B	
992-997	992-997	———	———	E9A 902-907	E6A	
998-999	998-999	———	———	E9A 908-909	E7A	
994B, 996B	994B, 996B	Sold to EMD	———	———	E7B	
998B	998B	———	———	———	E7B	

Present Passenger Units

Road Nos.	Formerly	HP	Builder	Model	Whl. Arngt.	Tr. Eff.	Weight	Date	Notes
900-911	987,991-999, ?, ?	2400	GM-EMD	E9A	A1A-A1A	?	339,100	1946, 61	29
900B-904B, 910B-911B	985B, C, 987B, C, ?, ?	2400	GM-EMD	E9B	A1A-A1A	57,030	339,100	1956	26, 35
925	C&NW 5007B	2250	GM-EMD	E8A	A1A-A1A	55,940	332,456	1953	45
926-942	New	2250	GM-EMD	E8A	A1A-A1A	55,940	332,456	1950-3	
922B-925B	983B, C-984B, C	2250	GM-EMD	E8B	A1A-A1A	?	?	1953	26, 29
926B-949B	New	2250	GM-EMD	E8B	A1A-A1A	56,100	333,440	1950-3	
943-962	New	2400	GM-EMD	E9A	A1A-A1A	56,380	335,170	1954-5	46
950B-974B	New	2400	GM-EMD	E9B	A1A-A1A	56,990	338,870	1954-5	47
988	EMD 765	2000	GM-EMD	E7A	A1A-A1A	?	?	1947	44
989-990	989-990	2000	GM-EMD	E7A	A1A-A1A	?	?	1950	29
988B, 996B	988B, 996B	2000	GM-EMD	E7B	A1A-A1A	?	?	1946	

UP eastbound extra, turbine-electric No. 52 and 98 cars near Emory, Utah.
R.H. Kindig, 3831 Perry St., Denver, Colo.

JIM HAS ASKED ME FOR A DATE, BUT HE'S SUCH A 'DUD'!
I DON'T BLAME YOU. HE COULD BE POPULAR IF HE WERE MORE SURE OF HIMSELF
WE REALLY SHOULD INVITE JIM TO OUR DANCE SATURDAY NITE
GOSH, NO BETTY, WHO WANTS A WALLFLOWER SPOILING OUR EVENING
ED, I'M 26 AND GETTING NOWHERE FAST! WHAT'S WRONG WITH ME, ANYWAY?
TAKE THE H.V.S.I. HOME STUDY COURSE IN PERSONALITY DEVELOPMENT WITH VOICE AND SPEECH IMPROVEMENT!
IT DID WONDERS FOR ME— IT CAN DO THE SAME FOR YOU
YOU TOO CAN BE MORE POPULAR IN 30 DAYS WITH H.V.S.I.
1st LESSON FREE!
LEARN HOW H.V.S.I. TRAINING CAN HELP PEOPLE BE MORE POPULAR AND SUCCESSFUL IN AN AMAZINGLY SHORT TIME
MAN! WHAT A TERRIFIC COURSE! HI-FI, L.P. RECORDS, LESSONS, COMPLETE INSTRUCTIONS! NOW I'LL GAIN MORE FRIENDS, HAVE FUN, DO BETTER ON MY JOB, TOO!
JIM, YOU'RE LIKE A NEW MAN! HOW DID YOU GET SO DREAMY SUDDENLY?
MAN! AM I GLAD I TOOK THE H.V.S.I. COURSE!
BE SURE TO COME TO OUR NEXT DANCE TOO, JIMMY, DEAR!
MAN! TAKE IT FROM ME! H.V.S.I. TRAINING IS A MUST IF YOU'RE BEING LEFT OUT SOCIALLY AND ON THE JOB— SEND THIS COUPON FOR FREE INFORMATION AND FREE FIRST LESSON! DO IT NOW... BEFORE IT'S TOO LATE!
H. V. S. I. STUDIO A-34
5504 HOLLYWOOD BLVD.
HOLLYWOOD 28, CALIFORNIA
Rush me at once, complete information & FREE 1st LESSON.
Name ..... Age .....
Address .....
City ..... State ..

Steam in Mexico

NdeM narrow-gage steamer about to leave Puebla station with a passenger train.
Photo by John E. Martin

Just back from his tenth vacation trip to Mexico—"the land of enchantment," he calls it—John E. Martin reports that he enjoyed most of all the experience of riding steam-engine cabs on the narrow-gage lines winding around the mountain sides. John is an Illinois Central engineer living at 1249 Worthington St., Memphis, Tenn. 38114. His pretty Mexican-born wife, Estela, accompanied him on the tour.

"In the south of Mexico," he writes, "steam survives for the present but its future looks very dim. Steam engineers are already learning how to handle diesels. Inasmuch as the National Railways of Mexico use diesels built by GM, GE, Alco, and even Baldwin, the men have many instruction books to study in the school of diesel locomotive operation and repair at San Luis Potosi."

Another place John visited was the town of Huehuetoca, 29 miles north of Mexico City, where hundreds of once proud powerful steamers were being cut up by the blow-torch. This graveyard was a sad reminder of the great days when steam ruled the rails.

But steam is not dead yet. Steam trains 224 and 223 run daily between Coatzcoalcos and Salina Cruz, 181 miles. Other steam power wheels trains 238 and 237 between Aguascalientes and Irapuato, 139 miles; trains 202 and 201 between Corodoba and Tierra Blanca, 74 miles; trains 228 and 227, Irapuato and Escobedo, 48 miles; and trains 212 and 211, Rodriguez Clara and San Andres Tuxtla, 43 miles. Four steam trains burnish the rails daily between Puebla and Apizaco, 28 miles, while two daily mixed and two extras cover the 32 miles between Irapuato and Guanajuato. Larger steam locomotives pull many freight runs as far north as Escobedo, 188 miles from the capital.

The Niagaras (4-8-4) are kept in fine condition, but small steamers will survive longer because many big ones are being scrapped now.

"Steam is likely to dominate the National's narrow-gage lines for another year," John Martin tells us. "The longest n.g passenger run covers 186 miles between Mexico City and Puebla via Ozumba and Cuautla. Six n.g. steam passenger trains roll into and out of the old San Lazaro passenger station in the quaint, old, historical side of Mexico City. These are Nos. 110 and 109, between the capital and Puebla; 130 and 129 between the capital and Cuautla, and 128 and 127 between the capital and Ozumba.

"Have you ever ridden a steam-powered, narrow-gage, mixed train? Mexico still has a few left. Nos. 258 and 257 make daily 102-mile runs between Puebla and Atencingo while Nos. 132 and 131 link Puebla with Teziutlan via Oriental. Another slim-gage line, between Cuautla and Puente de Ixtla, 48 miles, operates two daily mixed trains with steam.

Mexico City boasts the nation's heaviest concentration of narrow-gage steam power; its roundhouse and switching yards are located east of the San Lazaro passenger station.

"Off limits to the big brother locomotives of standard gage," our correspondent writes, "the little narrow-gagers pull standard freight cars over some of yard tracks, which are equipped with a third rail to serve both gages. Ozumbo has the second most important narrow-gage terminal. Inside Puebla's modern shop buildings are facilities for servicing steam locomotives of both gages.

"Although the narrow-gage Coahuila & Zacatecas is fully dieselized between Saltillo and Concepcion de Oro, it has stand-buy steam locomotives ready for emergency services. Unlike railroad operation in our own country, odd-numbered Mexican trains run north while those with even numbers head north."

Also visiting Mexico was Mac Owen of Newcastle, Calif., with his wife. Mac found "lots of steam there," shot 2100 feet of film and over 700 color slides of Mexican steam engines and trains.

"Although we saw no steam on the Pacifico, the old SP of Mexico," he writes, "most water spouts and tanks on that line are still intact. Entering Mexico City, we saw two Mikes and a 4-8-4 and while passing Valle de Mexico we noted many other steamers.

"Getting visitors' permits, we went into the roundhouse and saw 20 locos, mostly steamed up. The division had a large concentration of steam between Mexico City and northward to Irapuato —more than 50 locos: Mikes, 4-8-2's 4-8-0's, and especially 4-8-4's. Other than two Consolidations at Aguascalientes, that was as far north as we spotted NdeM steam.

"Most steamers leave north from the capital very early in the morning, so the show soon ends, but a few 4-8-4's depart in late afternoon. At Aguascalientes we saw a 4-8-4 fully rebuilt and they were rebuilding a 2-6-0 and a Pacific. The National is saving some of its steam power for a museum. We saw a scrap line 40 miles north of the capital where the last 2-6-6-2 and some smaller locos, all very old, are being preserved."

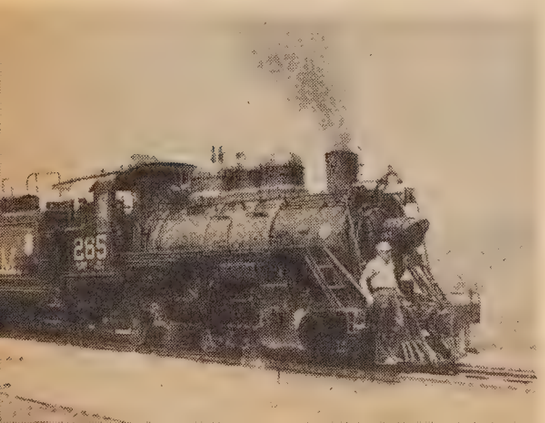
Steam is very active on the narrow-gage to Puebla. Mac noted 3 trains leaving San Lazaro station on the east end of town, and much freight activity. Also much steam in and around Amecameca, including an ancient narrow-gage 4-6-0 from a plant at San Rafael.

"At Merida," he goes on, "we saw a 4-6-0 built in 1881, the oldest loco I know of in regular service. An 1887 Baldwin 4-4-0 roared out of town with two coaches and a boxcar, and 3 n.g. trains pulled into Merida station, one behind a 4-6-0, another behind a 2-6-0.

"In the enginehouse north of town we saw a standard-gage 4-6-0 cold, one 4-4-0 being fired up and another in bad order. A n.g. 4-4-0 was getting a new pilot. Many other steamers were being repaired. We saw an old Mexicano 2-8-0 with Belpaire boiler switching at Esperanza, and lots of steam activity between Irapuato and Chihuahua."

Photo by John E. Martin

Slim-gage loco heads for roundhouse in Puebla after being uncoupled from the daily mixed train to Atencingo.



U.S. Naval Scientist Reveals How You May

NOW! FILL YOUR GAS TANK ONCE A MONTH... CHANGE YOUR OIL ONCE A YEAR!

Amazing invention converts raw untapped power in ordinary gasoline into a fantastic new source of energy for your car!

Yes, SAVE EVEN up to $15.00 a month, save up to 35 gallons of gas each month . . . without adding a single new part to your car!

by CARL ANDERSON

(as compiled from official Government documents and scores of reports from the leading oil companies in the United States)

What you are about to enter is a new era of automotive history. An era of mileage miracles where you can take a 10 year old car and drive across 6 states of the union on a single tank of gas—Where you can blaze a trail from New York to Chicago on just 2 or 3 tankfuls—an era so wondrous and startling that "impossible" savings like 29, 33 even 35 gallons per month are proven facts—

AND NOT ON SOME DREAM CAR OF THE FUTURE BUT ON THE VERY CAR YOU MAY BE DRIVING TODAY!

Yes, what you are going to do to your car is the very same thing that leading automotive scientists now do to their cars . . . the very same thing that both police cars and huge taxi fleets now do to even the worst gas gulping engines they have—Yes, the very same thing that even Rolls Royce is now doing to their most expensive models—you are going to convert the hydro-carbon atoms in ordinary gasoline into a surging new source of power for your car . . . power that costs you not one single cent!

So come now to secret Gov't file No. 156,695 . . . and brace yourself for the most spectacular invention of our times . . . the dream-child invention of U. S. Naval Scientist W. T. Johns, that's guaranteed to give you more blazing power, more super pick-up, more miles per gallon than you could ever possibly hope for . . . and at the same time save you as much as $300.00 a year on gas and oil, year after year after year.

Imagine the thrill of filling your gas tank as little as once a month . . . as you convert untapped power into a whole new storehouse of energy!

How is this possible? The answer is simple: You see, as any automotive engineer will tell you, the hydro-carbon atoms in gasoline, make it one of the most powerful fuels on the face of the earth. More powerful than the fuel used in jet aircraft . . . more powerful than liquid oxygen . . . even more powerful than the fuel in giant diesel engines.

Then what happens to all the power in those hydro-carbon atoms? Once again the answer is simple . . . only this time it's expensive, too. Because, out of every gallon of gasoline pumped into your car today, your present engine can extract only 30% of the total power potential. What happens to the other 70%—that other 25c worth of gasoline in each and every gallon? NOTHING! ABSOLUTELY NOTHING! Your engine just isn't equipped for the extra power in those atoms . . . and they go wasting away out of your exhaust pipe, unused, untapped, PURELY WASTED. It's as if your tail pipe was literally spitting out good money mile after mile after mile.

Can something be done about this ridiculous waste of money and gasoline? That's the question that's stumped the experts ever since they first discovered this vast storehouse of energy in ordinary gasoline. Only, now the answer is YES! Here's why:

The Amazing Discovery of U.S. Naval Scientist W. T. Johns

Years ago while working with special government engines, Naval Scientist W. T. Johns noticed a peculiar thing: these high-powered engines were able to extract more power from the gasoline fed to them, than ordinary automobile engines were able to do. Realizing he was on the verge of perhaps one of the most significant discoveries of our age . . . W. T. Johns quickly pooled all his efforts . . . plus all the knowledge he had gathered as a research Scientist for the Navy Rocket program . . . and here is what he uncovered:

More Miles Per Gallon Than You Ever Dreamed Possible!

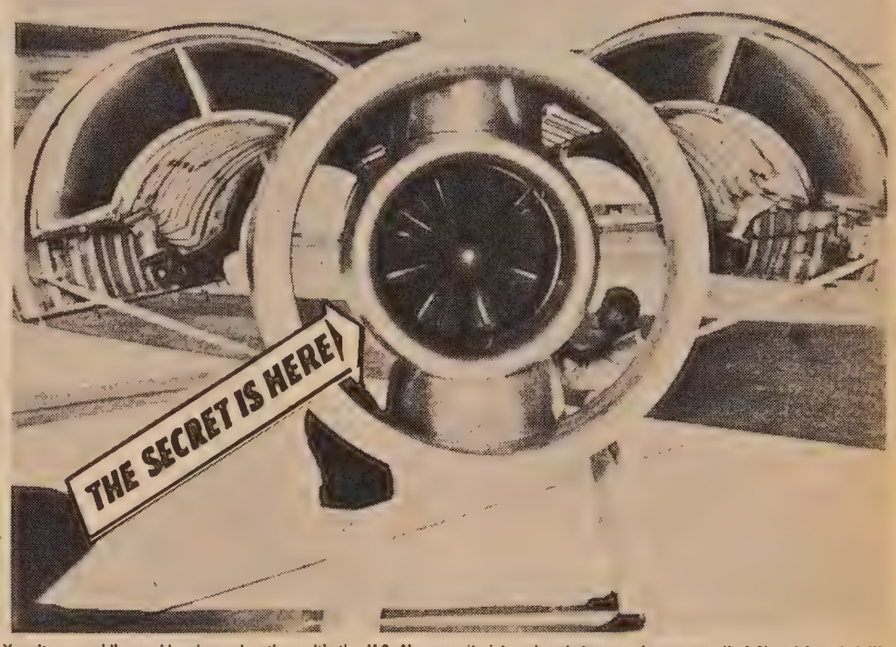
The secret of extracting more blazing power from the untapped hydro-carbon atoms in ordinary gasoline was easily achieved when his new invention called the Dynovac was attached to the car engine . . . thereby eliminating one of the greatest causes of lost hydro-carbon power . . . AND CONVERTING THOSE WASTED HYDRO-CARBON ATOMS INTO PISTON DRIVING POWER mile after mile after mile.

Even more startling, because of this conversion . . . because you could now get more power with less wear and tear on your car's engine, W. T. Johns was astounded to find that not only could you fill your gas tank as little as once a month . . . but you only had to change your oil as little as once a year!

In plain simple talk, the miracle that U. S. Naval Scientist W. T. Johns discovered while working for the Navy . . . he then applied to cars. So that you can now save up to 35 gallons of gas each month . . . up to $300.00 worth of oil and gas each year!

Is This Invention Available To The Public?

By now you are probably saying to yourself, is this invention yet available to the public . . . and if so, how can I get it? Well, on American cars the principles of this amazing invention is not yet standard equipment . . . and will not become so for at least 2 or 3 years OR LONGER. On foreign-made cars the same is true with one exception. Should you purchase a Rolls Royce. A BUILT-IN ELECTROLYTIC UNIT USING THE PRINCIPLE OF JOHNS' DISCOVERY has already been installed by the factory. But since we don't expect most people to be buying Rolls Royce cars tomorrow (even though they are the finest in the world) . . . here is how you can get a DYNOVAC for your car . . . and see with your own eyes the fantastic change it will make in your car's engine . . . and all at our risk on this special trial offer.



Yes, it was while working in conjunction with the U.S. Navy on its jet and rocket research program that Naval Scientist W. T. Johns first unlocked the secret to his great new invention. For it was on engines such as this that Johns first discovered how to unlock the latent power in wasted hydro-carbon atoms . . . THE VERY SAME ATOMS FOUND IN ORDINARY GASOLINE . . . ATOMS THAT YOU CAN NOW UNLEASH INTO A NEW SOURCE OF ENERGY FOR YOUR CAR! For full details read the rest of this exciting breakthrough in automotive engineering.

What This Means To You

It means that if you are sick and tired of seeing your car literally "ignore", waste and throw away hundreds of gallons of gas. . . If you are sick and tired of putting in a 35c gallon of gas and getting back a mere 10c worth of performance . . . then here at last is the dream discovery you've been waiting for. Because, thanks to the miracle DYNOVAC no matter if you drive in heavy stop and go city traffic . . . or if you blaze the turnpikes at 70 or 80 miles an hour speeds . . . no matter whether you drive in sub-zero climates or even oven-hot deserts . . . no matter whether you drive 50, 60, even 100 miles a week, month after month, year after year . . . no matter whether your car is a six cylinder or 8-cylinder, manual shift or automatic shift, whether a brand new 1964 model or one that's 10 years old

. . . YOU CAN NOW FILL YOUR GAS TANK JUST ONCE A MONTH, CHANGE YOUR OIL ONCE A YEAR!

Gas Savings As High As 50% Or More

reports panel of consumers who have tried this sensational invention! And each day new reports of equally glowing results still keep pouring in.

46% BETTER GAS MILEAGE reports John Doremus of Passaic, N. J. "And I not only got all this extra mileage per gallon . . . but was also able to use regular rather than high test gas."

GETS 22 MILES A GALLON ON CAR 53,000 MILES OLD . . . Roscoe Wagner, Knoxville, Iowa, confirms lab proof that with DYNOVAC you achieve fantastic gas savings, oil savings . . . even on cars that are way past "middle age."

GAS MILEAGE SOARS AS HIGH AS 50% BETTER writes G. S. Selig, Cambridge, Mass. Lavish praise after evaluating the results of this amazing invention after 40,000 of both city and highway driving.

OVER 60% MORE MILES PER GALLON IN CONSUMER COMPARISON TEST, reports C. B. Thomas, Marysville, Mich. . . . in comparing the car with Dynovac vs. a previously owned V-8 without Dynovac.

50% MORE MILES PER GALLON raves C. Jackson, White Plains, N. Y. Still another case that confirms our belief that for improving your car's overall performance nothing can match the miracle DYNOVAC.

10 YEAR OLD CAR GETS 23 MILES A GALLON . . . R. C. Chuber, Mineola, N. Y. details his remarkable results after installing this thrilling scientific invention.

Prove It To Yourself At Our Risk

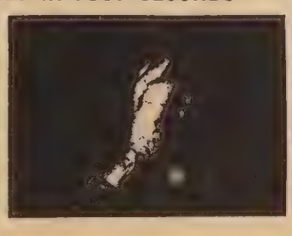
Nothing speaks louder for a product than a satisfied user . . . and nothing can convince you of DYNOVAC'S amazing results better than to have one for your car. That is why we say use it and prove to yourself the fantastic results obtained by test-scientists, test-drivers, and test laboratories of this amazing invention.

To do this simply enclose the coupon below and try this miracle invention for a full month. If at the end of that time you are not convinced that here is the most amazing invention in all automotive history . . . that it does not deliver every claim made on this page . . . then simply return it, it has cost you nothing, that's how positive we are of the results you will receive. But recent cost factors have pushed up our costs . . . within a short time the price of the DYNOVAC will be increased from $4.95 to at least $5.95 or higher. So before prices rise, order yours today!

WINTHROP-MARTIN INC., DEPT. AMG-3 744 BROAD ST., NEWARK 2, NEW JERSEY

PERFORMS GAS-SAVINGS MIRACLES ON EVERY MAKE OF CAR... AND INSTALLS IN JUST SECONDS

To install your DYNOVAC takes but a few minutes. Simply attach to your engine block at mouth of oil-opening—that's all . . . nothing else. (Easy directions accompany each DYNOVAC; it's so easy that you need not know a single thing about an engine to install this invention, yet you save up to 10 times the price of this amazing invention in just a few months after installing it. See NO RISK TRIAL offer at right.)



Here's the Most Sensational GUARANTEE You Ever Saw

No matter how old your car may be, whether it's a compact, regular car, bus, truck or even a 'taxi'—whether you drive in the city—in stop and go traffic or on high speed turnpikes, you must achieve the most incredible gas savings and overall performance from DYNOVAC or you may return DYNOVAC anytime for a full purchase price refund—no questions asked!

MAIL NO-RISK COUPON TODAY BEFORE PRICE RISE GOES INTO EFFECT

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744 BROAD ST., NEWARK 2, NEW JERSEY

Please rush me the sensational DYNOVAC immediately! I understand the price is $4.95 for which I enclose cash, check or money order. It is understood that I may return the unit anytime for full purchase price refund if I am not fully satisfied.

MAKE OF CAR ..... YEAR .....

NAME .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

SPECIAL OFFER: Purchase one for yourself and one for a friend and save even more. Order two DYNOVACS for just $8.95 (a savings of $1.00) same guarantee as above. Make of Second Car ..... Year .....

☐ C.O.D. orders enclose $1.00 deposit. Same money back guarantee.

IN CANADA: 71 YORK ST., TORONTO 1, ONT.

HOBBY CLUB

by Sy Reich

Remember the Philadelphia & Reading's fast Camelbacks? Here is No. 373 with a six-car express at Jenkintown, Pa. The cars with an oval plaque on the side came from North Pennsylvania Railroad when it was merged into the P&R system in May, 1879. The engine was built at the Reading Shops in September, 1882, later renumbered 196, class D-4c. She was reboilered in June, 1897; reclassified D-3e in April, 1900, and retired in May, 1923. Note the oldstyle switch target at the left.
Photograph from Reading Company's historical collection

FOR MORE THAN 30 years this magazine has been publishing locomotive rosters of North America that are detailed and accurate, covering all large roads and many small ones—everything from humble 0-4-0 switchers to mighty Mallets, with specifications, names of builders, etc. Inasmuch as most of our back numbers are now out of print and hard to get, we have authorized two capable men to reprint all of our steam rosters, arranged exactly as they appeared in *Railroad Magazine,* in book form for permanent reference.

Sy Reich

These men are railfan Robert J. Wayner, author of the recent popular book *Car Names and Consists,* and Paul W. Tilley, a retired Santa Fe yard clerk, who will jointly put out this great historical collection of technical data in two volumes. Each volume will have more than 200 pages and dozens of good photos printed on 70-pound coated stock.

Volume I of *Steam Locomotive Rosters,* due off the press this April, features the 17 biggest U.S. roads plus the Canadian National and Canadian Pacific. For some systems there are as many as three non-conflicting rosters of different dates. Volume II, completing the series, will carry all roads not covered in Volume I and is scheduled for early summer publication this year. Each volume is priced at $4.75 postpaid, both $8.50, with checks and money orders made payable only to Robert J. Wayner, Box 871, Ansonia Station, New York 23, N.Y. (Do not mail orders for *Steam Locomotive Rosters* to this magazine.)

Also for roster fans is a new paperbacked book, *Steam in the Rockies: A Denver & Rio Grande Roster,* 32 pages, 8½x11″, compiled and written by Cornelius W. Hauck and Robert W. Richardson, available only from the Colorado Railroad Museum, Box 641, Golden, Colo., at $2 postpaid.

This is a dependable Rio Grande steam roster dating back to No. 1, the old *Montezuma,* scrapped away back in 1888. It is printed on a good grade of slick paper and generously illustrated. Included are a well prepared historical account of "Locomotive Development on the Rio Grande" and a Denver & Salt Lake steam roster. We predict a heavy sale for this book.

The Steam Parade

F. Nelson Blount, president of the Monadnock Northern RR. and the Steamtown Foundation has reached an agreement with the State of Vermont resulting in his lease of the Bellows Falls-to-Ludlow section of the now abandoned Rutland Railroad. His purpose in leasing the line is to resume freight service to the shippers. Mr. Blount further agreed to run excursion trains and has received permission from the present Rutland Railroad to continue the name "Rutland".

"Three steam locos are in daily use on the Duluth & Northeastern at Cloquet, Minn., and you can ride a caboose there for 84¢ a round trip," writes Lester Fremming, 1650 N. Pacific, Kelso, Wash. "The D&NE has 5 engines in all, 2 of them slide valve."

In addition to C&O 4-6-4 No. 490, the following steamers are stored at Huntington, W. Va., shops: 4-6-0 No. 377, C&O 2-8-4 No. 2707, and Elk River Coal & Lumber 2-8-0 No. 10, which has been donated to NRHS Chapter's local museum, reports Tim Hensley, 2347 Vinton St., Huntington, W. Va.

"We are looking for 4-6-2, 2-6-2, 4-8-2 or 2-8-2 steam locos and used passenger coaches (streamlined, with reclining seats), in good condition, so we can operate a railroad between Lake Placid and Utica, N.Y., over 105-lb. steel, 142 miles, over a branch that may be abandoned soon," writes L. A. Wood, 4 Leona St., Saranac Lake, N.Y. 12983. "Send me names and addresses of anyone who sells such equipment."

The old Louisiana Eastern's 4-6-2 No. 4 and a Meade Corp. 0-4-0 have been bought by a man named Ottenger, of Phoenixville, Pa., reports Frank Miller, 145 W. Elm St., Norristown, Pa. Ottenger is overhauling the engines and hopes to operate on Reading tracks.

C&NW 4-4-2 No. 395 is not preserved at the St. Louis Mueum of Transport as our February issue stated but was scrapped in 1952 at Sterling, Ill., according to F. E. Haynes, West Chicago, Ill. The Atlantic type in that museum, No. 1015, minus tank, was built by Schenectady in 1900 and was the first C&NW 4-4-2.

Steam power in Louisiana was seen recently by Paul DeVerter II, 3427 Banbury Pl., Houston, Texas 77027, as follows: At Fisher the La. Longleaf Lumber Co. was operating a woodburner over its 6-mile route, usually between 6 and 7 a.m. and at 10 a.m. Tuesday through Saturday, occasionally on Monday also. At Elizabeth the Calcasieu Lumber Co. had a steam switcher which will probably be taken out of service before you read this item.

"Who knows of steam equipment in fair condition that can be bought for use on a new railroad?" asks John W. Nelson, chairman, Ulster & Delaware Committee, 71 Humphrey Dr., Syosset, N.Y. 11791. "Our committee hopes to acquire the entire U&D, a freight-only branch of New York Central, 117 miles between Kingston and Oneonta. We could use a 4-6-2, 2-6-0, 2-8-0, or even a diesel of about 44 tons. We answer all mail. Anyone who gives us a fruitful lead will probably get an honorary post on the U&D board of trustees."

The 100th aniversary this year of J. & W. Seligman, 65 Broadway, New York 6, N.Y., will be marked by publication of a history of the firm, which helped to build and finance railroads.

Joseph Seligman, founder, bought a standard-gage 24½-ton loco (0-4-0 or 4-4-0) from M. Baird & Co., which later became part of the Baldwin company, named her the *Seligman,* and rented her to the Memphis, Carthage & Northwestern RR. as No. 2 for $70 a week. Carl J. Weeks of J. & W. Seligman & Co. seeks info. on this engine and a photo. Who can help?

The picturesque slim-gage steam line between Mexico City and Puebla (see page 54) is still busy but is doomed to extinction within a few months unless drastic action is taken to save it. Readers who want to see this famous line preserved are asked to send letters and petitions to Miss Cora Van Milligen, Florencia 32, Mexico 6, D.F., who is devoting much time to this project.

Use Our Money

We'll Send You FREE
Everything You Need
To Start Your Own Business

No investment. No experience needed. Age no barrier. You can start MAKING MONEY 8 WAYS immediately by showing original Ortho-Vent Spring-Step and Stuart McGuire Footwear to friends, neighbors, fellow workers.

Earn immediate cash commissions. Qualify for free life insurance, monthly cash bonus, free shoes, U.S. Savings Bonds, franchise sales force and lifetime repeat business. We'll send you a complete selling outfit FREE and at absolutely no obligation.

New Shoe Construction Makes Money for You

Our Spring-Step Cushion construction has caused our sales to increase 2400% in less than 12 years — has made our representatives highest paid in industry. Spring-Step puts a layer of airfoam cushion between the foot and the hard surfaces—produces America's most comfortable shoe.

World's Largest Shoe Catalog Features 280 Different Styles

for men, women and children. For work, play and dress. All sizes. All widths. All price ranges—from $4.95 to $37.50. With Ortho-Vent you have largest shoe store in America at your fingertips. And this means quick cash for you—earn up to $10 on a single sale.

"I made $23 my first afternoon with Ortho-Vent and I didn't leave my neighborhood."—E.L.—Calif.

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Ortho-Vent Shoe Company
5344 Brand Road, Salem, Virginia

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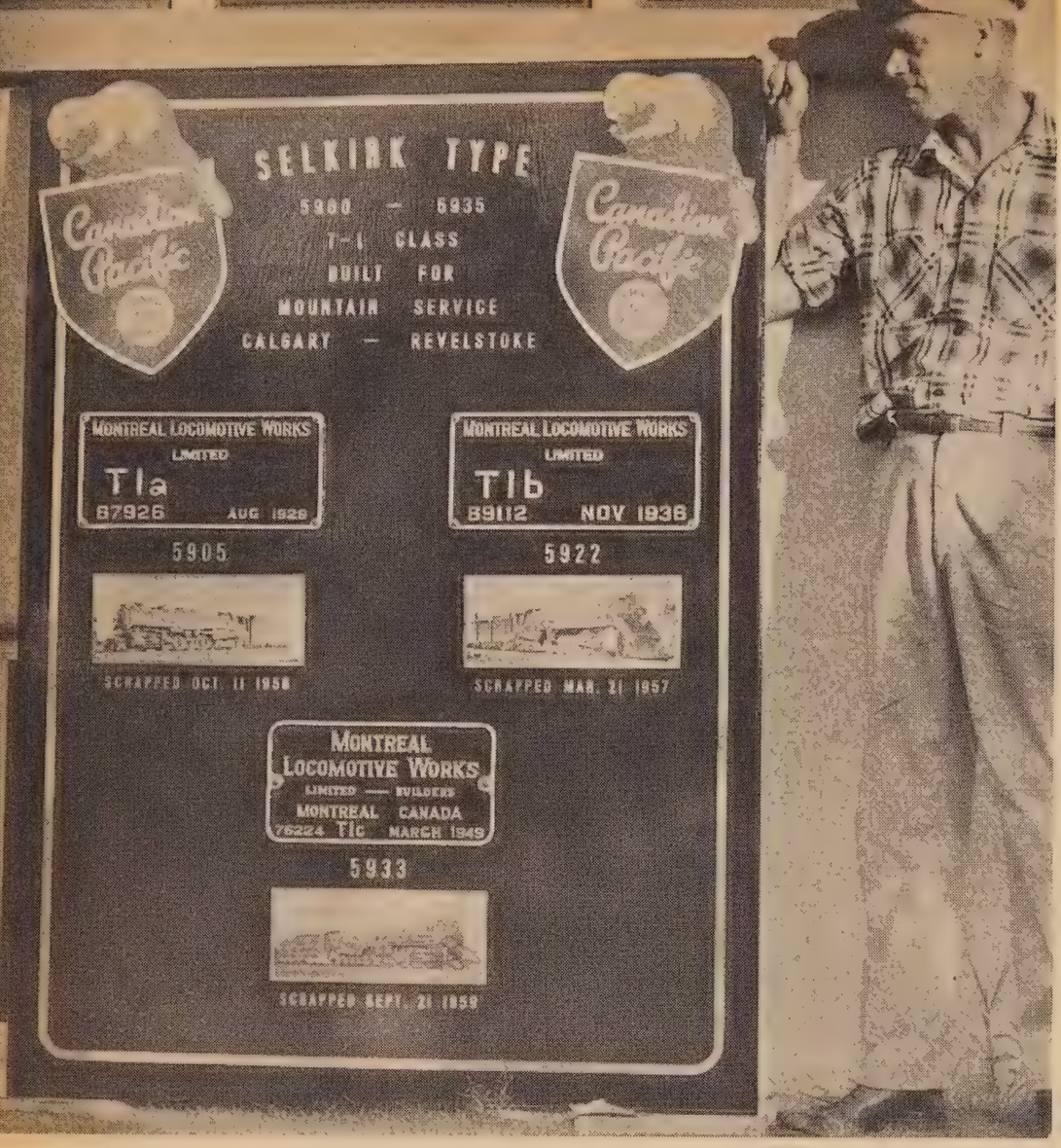
Less steam power is left on Vancouver Island, B.C., than recently published statements indicate, says Elwood White, vice pres., B.C., Railway Historical Asso., P.O. Box 114, Victoria, B.C., Canada.

"Queen Charlotte Islands no longer have rail service," he writes, "Canadian Forest Prods. at Englewood has a 2-8-2 and a 2-6-62T which probably won't run again. Commox Logging & Ry. at Ladysmith don't use steam but have 2-8-2 No. 11 and two-Truck Shay No. 12 on display.

"Western Fuel Co. of Nanaimo has not existed for years. McB. & Powell River has been using trucks for years at Port Alberni and Powell River, although there's a mile of narrow-gage line around the paper mill at Powell River. The Hillcrest Lbr. Co. is using a 70-ton Climax and 45-ton Climax at Mesachie Lake and has a 27-ton Shay stored. McMillan-Bloedel & Powell R. Co. is operating a 2-6-2 at Nanaimo Lake, with a 2-8-2T stand-by. Their Chemainus plant is using a 2-6-2ST with a 2-8-ST stand-by. No other steam locos are working in B.C. except the 90-ton Shay that occasionally handles



Besides being a Canadian Pacific engineman, W. H. N. Rossiter of Oakville, Ontario, is a photographer (see page 6) who collects railroadiana. Here he is with the first of a series of large panels he built to exhibit builders' plates of CPR steam locomotives. The panel is made of plywood, with cork letters, and is finished in maroon with black border and yellow striping like the finish of CPR passenger steam tenders. Rossiter wants to hear from other collectors with display panels of such plates. Photo by Dick George, Oakville, Ont., Canada

wharf loading in North Vancouver."

Elwood adds that his Association's newest booklet, *Shays on the Switchbacks: The Story of the Lenox-Mt. Sicker Narrow-gage,* 40 pages, 30 pix, 2 maps, sells at $1 (no checks).

In addition to the water towers mentioned in recent issues as still standing, Eddie Fulcomer (639 Del Norte, Fort Collins, Colo.) writes: "Three D&RGW tanks are on the line between Leadville and Pueblo, Colo. Also two at Laramie, Wyo., on the UP, one at the north end of the yard and the other about 10 miles south of town on the main line. The GW has a tank at Loveland, Colo."

Other tanks still extant are at Alton, La. (now used to store grain); Ashton, La., and Heron Lake, Bingham Lake, and Wilder, Minn., reports John Staehell, P.O. Box 473, Salem, S. D. 5708.

"Please donate or send C.O.D. Baldwin builder's plate 69430 and U.S. Army Corps of Engineers plate for White Pass & Yukon steam loco 195, now on display," urges Carl Mulvihill, Box 191, Skagway, Alaska 99840. "Send them to 'Trail of '98' Museum here at Skagway. Some one 'borrowed' the plates long ago."

Ken Cassells has a fine collection of over 2000 locomotive and train photos, mostly steam, some diesels, of Australian and New Zealand railways, taken during the last 25 years, from which he sells prints, $1.25 a dozen postpaid.

"I'm not out to make money," he writes, "just eager to share my pictures with other railfans. With any income I get from this sale I will buy HO gage models of Climax, Heisler, and Shay engines. I was a railroader for six years but resigned after World War II service and became a high school teacher. One of my great grandfathers arrived in New Zealand in 1840, the year the colony was founded, and became a pioneer railway builder in this land."

Ken is secretary of the New Zealand Model Railway Asso. His address is Box 23, Tawa, New Zealand. The railways in his country are half steam, half diesel.

Featured in next issue of *Railroad Magazine* (dated June, out April 2) will be "The Railroad's Drive for Passenger Business," based on a recent survey by Frank P. Donovan, Jr., and "Steam Days on the Western Maryland" by Bert Pennypacker.

Bert is an authority on steam power in the East. His magazine articles have been very well received and his new book, *Reading Steam Pictorial,* 128 pages, 8½x11″, over 250 photos plus text matter, priced at $7 postpaid, will come out in March. The book publishers, P. & D. Carleton, 305 Henry St., Fairview, N.J. 07022, offer a pre-publication price of $6 for orders received before Feb. 28.

Lloyd Lewis, author of "Before the Wires Came Down" (June '63 *Railroad*) is gathering material for another article for us, on N&W-built steam locomotives, and wants readers to send him info., anecdotes, reminiscences, pix. His address is Box 314A, Residence Hall for Men, Marshall University, Huntington, W. Va. 25700.

Setouts and Pickups

Genuine B&O trainsheets, 730 in all, issued in the year 1958 at Akron, Ohio, recording actual minute-by-minute performance of from 60 to 100 trains, may be bought at $2 each from John P. Spikes, Sr. (see page 20), 472½ Saunders Ave, Akron, Ohio. So far as we know, nothing like this has ever been offered before.

"Why People Ride Trains," illustrated article by Freeman Hubbard, will appear in March issue of *Arogsy,* a 50¢ monthly put out by the same company which publishes *Railroad Magazine.* March *Argosy* is due on news-stands about February 18th.

Before the Lehigh & New England tracks are ripped up, an excursion over the abandoned rails will be held Feb. 8. Send reservations to Danny Zeegler, Coaldale, Pa. 18218, who also is selling L&NE lanterns, marker lamps, etc.

Paul Prescott, 139 McKinley Ave., Conneaut, Ohio, has some 10,000 loco negatives plus about 1500 negatives of other railroad subjects and sells size 616 prints; 46-page list (3 columns mimeographed on legal-size paper) plus one print, 15¢. They are high quality.

Pictorial 1964 calendar, published by Upper Canada Railway Society, Box

122, Terminal A, Toronto, Canada, may be had for 75¢ postpaid.

Looseleaf-bound railroad calendar, with beautiful 11x7¾" photos, one for each month, issued by Pacific Railroad Society, Mount Rubidoux Chapter, 180 J St., San Bernardino, Calif., at $1.25.

For $5 postpaid you can buy from Hotchkiss Inc., 4055 Fox St., Denver, Colo. 80216, a map of Colorado Railroads in 1913, size 35x45", printed on antique bond, thanks to Rocky Mountain Railroad Club.

Orange Empire Trolley Museum, P.O. Box 501, Perris, Calif. 92370, announces its third annual rail tour via the Santa Fe to the outdoor play *Ramona* at Hemet, Calif., on May 2. The first year of operation required two trains; this year there will be three. Fare: adults $13, kids $9, including transportation, reserved seat at the pageant, and barbecue dinner. Ticket orders and payments must be received before April 15. Make checks payable to Orange Empire Trolley Museum.

Directors of the National Railway Historical Society have voted to accept the bid of the Pacific Northwest Chapter to sponsor the Society's 1965 convention in Portland, Oregon, reports Jim Scribbins. The 1964 convention will be held at Newark, N. J.

Spring show of New Haven Society of Model Engineers will be held at 90 Court St., New Haven, Conn., on Feb. 14, 16, 21, 23 and 28 and March 1, Friday evenings and Sunday afternoons with operating trolleys and railroads in O and HO gages.

Several readers have asked why Miss Candy Womack is pictured with dark hair on our February cover but described in H. Reid's article as a blonde. The hair in our cover picture shows darker than it really is on the girl herself, due to a combination of technical difficulties in both color photography and the photo-engraving process. Candy has gray-green eyes and lives at 1308 Jenifer St., Norfolk, Va. 23503. She likes to get mail.

The Pennsy has had many requests for prints of its calendar paintings by Grif Teller. It is now selling four of them, each 16x12", suitable for framing, at $2 for the set in a portfolio. They show "On Time" (steam train in a snowstorm), "Crossroads of Progress" (two steam trains), "Horseshoe Curve," and "Partners in Progress" (featuring a GG1). Send orders to "Portfolio," Pennsylvania Railroad, Room 1234, 6 Penn Plaza Center, Philadelphia, Pa.

Marianna & Blountstown RR. of Blountstown, Fla., has just asquired Jacksonville Navy Yard diesel No. 44 and renumbered it 75, reports Charles Confiff, 534 Witsell Rd., Jackson, Miss.

World's Fair Souvenirs

Beginning April 22, when the New York World's Fair opens, the Erie-Lackwanna Railroad will operate passenger-boat service between its Hoboken, N.J., terminal and the big fair at Flushing Meadows Park. The Long Island Rail Road will run fast shuttle rail service between what is left of Penn Station and the fair, using 50¢ bronze tokens.

As a souvenir, the LIRR will sell a package containing one of these tokens, a 20-page history of the 130-year-old commuter railroad, a folding map, color decals of its insignia, photo reproductions of LIRR cars, diesels, oldtime steam engines, etc., and other literature. Complete package is available at $1, postpaid; address Long Island Rail Road, Dept. R. Box 666, New York, N.Y. 10046.

Book-Record Combination

TWILIGHT OF STEAM, a new "Steromonic" (playable on both stereo and monaural equipment) LP from Mobile Fidelty, is released as a companion disc to Ron Ziel's new book, "The Twilight of Steam Locomotives" (reviewed in Feb. *Railroad*). It includes plenty of variety in 17 tracks of shortline and fantrip steam such as the rarely or never-recorded Kentucky & Tennessee, BEDT, Virginia Blue Ridge, Magma Arizona, and Strasburg plus more familiar material (Reading T-1's, CB&Q 2-8-2 4960, an SP 4-8-4, BC&G, etc.). Aside from some whistle distortion, the sound quality is up to MF's usual high standards. The disc is another competent, well-edited MF job, though with little really unusual action (the BC&G is the major exception to this). The book and record can be bought separately for $5.95 apiece or together for $8.95 from Mobile Fidelity, P.O. Box 336, Burbank, Calif. 91503. (Reviewed by Howard Shottenfeld)

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You can almost hear the mighty Delaware & Hudson 1525 blasting northbound out of Carbondale, Pa., as she did years ago with train WM-3, 7000 tons tied to her tail and three pushers shoving from the rear—four steamers on one freight train. Ah, that was railroading! Bert Pennypacker (4703 Palmetto Street, Philadelphia 24, Pa.) made this shot as she was rolling from Wilkes-Barre, Pa., through the mountains to Mechanicville, N.Y., a B&O connection, filling the sky with soft-coal smoke. He has written a feature article, "Steam Days on the Western Maryland," for our next issue (out April 2) and we are getting some good illustrations for it.

BOOKS of the Rails

BACKWOODS RAILROADS OF THE WEST: A Portfolio by Richard Steinheimer 178 pages, 12½x9¼", indexed, Kalmbach Publishing Co., 1027 N. 7th St., Milwaukee, Wis., $20.

Even though we have published dozens of Dick's photographs since 1951—good ones, too—we were not quite prepared for the breathtaking imagination and technical excellence shown in this great collection of his camera studies. Inasmuch as these shots, the whole 204 of them, all hitherto unpublished, were made by one man, the Steinheimer opus sets a precedent in the railbook field.

Kalmbach took a bold chance in putting out a volume priced at $20—well above the $15 and $16.75 that other publishers pegged for the huge Southern Pacific books written a few months ago by Lucius Beebe and Guy Dunscomb, respectively—but it is likely to have a large sale among the *aficionados*.

Steinheimer covers mostly steam, some diesel and electric operation, even trolley cars. His subjects are varied: a woman station agent on a bleak prairie, a "Rust in Peace" wreath adorning a retired steamer, two coalburners with a sky full of smoke climbing a grade, an overflowing tank, a torchlight giving a weird effect to a locomotive at night, a snow-covered steamer in dead storage, a log train unloading, a wistful-looking mutt guarding a carferry, a close-up of an outmoded link-and-pin coupler, four squat, boxlike, wooden cabooses in a line, and a dramatic night shot of a puffing log engine made from underneath a wooden trestle. But not all of the railroads pictured by Dick belong in the "backwoods" category.

THE OVERLAND LIMITED, by Lucius Beebe, 157 pages, 8½x11", with 225 illustrations, including 3 pages in full color, indexed, Howell-North Books, 1050 Parker St., Berkeley 10, Calif., $5.95.

Many experts have turned out de luxe illustrated volumes of rail lore but none has done it so often, so consistently, or with such flair for good writing and dramatic picture-sense as Lucius Beebe. You might suspect that in his 28 books, mostly about railroading, 14 in collaboration, with "Chuck" Clegg, much material would be duplicated. If you think that, however, you don't know Beebe. His output shows very few repetitions and his story of the *Overland Limited* stands in a gilded niche by itself. But the possibility of running out of rail lore has begun to cause the maestro some concern.

"When the bottom of the barrel of steam and old-time railroad art is reached," he wrote recently in *Trains*, "it will be the end of the road for . . . the sort of books I undertake to write and illustrate. The bottom is not yet immediately at hand, for little pockets and repositories of old-time photographs are still being traced and exploited, but the bottom is perilously near."

In his latest book Beebe says the *Overland* "was by no means the most distinguished, opulent, or celebrated name train" but it symbolized the West as no other *varnish* did. When it "was progressively downgraded and finally eliminated . . . something of wonder and glory vanished from the Western plains." It perished "in the tidal surge of mediocrity that passes for progress."

We like the book very much. We like even the endpapers drawn by E. S. Hammack, except for the frozen grins of those three lounge-car passengers who must have been posing for toothpaste ads.

JERSEY CENTRAL ALBUM, written and published by Warren B. Crater, 270 W. Colfax Ave., Roselle Park, N.J., 66 pages, 8½x11", paperbacked, illustrated, $3.25.

Here, at last, is a book we've been expecting for months. Being a CNJ locomotive engineer with a yen for railroad history, Warren obviously has taken a keen joy in writing this book from a wealth of interesting details researched and made available by the late Arthur E. Owen, Jr. The book is a sequel to his popular *Locomotives of the Jersey Central.* It covers trains and services, structures and facilities, construction and acquisition of component lines, locomotives classified, and marine operations, each section copiously illustrated with good clear photos.

RAILROADS AND THE ROCKIES: A Record of Lines in and Near Colorado, by Robert M. Ormes, 406 pages, 6x9", illustrated with 46 pictures, 77 maps, indexed, Sage Books, 2679 S. York St., Denver 10, Colo., $6.50.

After presenting a 64-page background of railroading in the Colorado area, Ormes recounts the individual histories of hundreds of separate lines, those actually built and some that never grew out of the paper stage. These capsule histories fill 333 pages, giving the book considerable reference value.

DIESELS WEST! the Evolution of Power on the Burlington, by David P. Morgan, 164 pages, illustrated, Kalmbach Publishing Co., 1027 N. 7th St., Milwaukee 3, Wis., $9.75.

Morgan devotes the first 23 pages of his CB&Q book to steam and the rest to diesel power. His material is well researched and ably written, but the book's size is as deceptive as supermarket packaging. While each page of good thick paper measure 7x9¾", the margins are so wide that the text matter per page is only 4x7".

Too many of the 120 illustrations are old familiar publicity shots. Whoever chose them failed to include a picture of the *Silver Charger,* unique shovel-nosed diesel, first unit of the *General Pershing Zephyr,* whose second unit was a baggage car. Also omitted are locomotive rosters. Some of the pictorial layouts in this book are amateurish and there are "widows" (short lines of type) at the tops of three pages. An author with David Morgan's standing rates the support of better book production.

Nevertheless, *Diesels West* ranks high in readability, accuracy, and reference value. The chapter on that dawn-to-dusk run of No. 9900 from Denver to Chicago 30 years ago is exciting enough to hold the interest even of those fans who might prefer the one entitled "The Great God Steam."

OCEAN LINERS OF THE 20TH CENTURY, by Gordon Newell, 192 pages, 8¼x10½", illustrated, picture-indexed, Superior Publishing Co., Box 1710, Seattle 11, Wash., $12.50.

A satisfying book for those who love the sea. We enoyed its history of the Canadian Pacific's famed Empress fleets of Atlantic and Pacific liners, dating back to Feb. 1, 1881.

RAILWAYS OF SOUTHERN AFRICA, by John R. Day, 143 pages, 4½x8¾", illustrated with maps and photos, indexed, Arthur Barker Ltd., distributed by Sportshelf, P.O. Box 634, New Rochelle, N.Y., $5.75.

The first railway in what is now the Republic of South Africa, two miles long, was opened for traffc June 26, 1860. Its sole locomotive, the *Natal,* "found in pieces and lovingly re-assembled, stands today in the great station" at Durban. After this opening, Day recounts the problems and hazards of building and operating railways through a region that today is very much in the news.

HOOT, TOOT & WHISTLE the story of the Hoosac Tunnel & Wilmington Railroad, by Bernard R. Carman, 44 pages, 5½x8½", illustrated, The Stephen Green Press, Brattleboro, Vt., hardcover $3.50, softcover $1.50.

Carman described the HT&W as "a 24-mile cliffhanger that taught the big ones a lesson." The present 10.93-mile line linking Hoosac Tunnel, Mass., to

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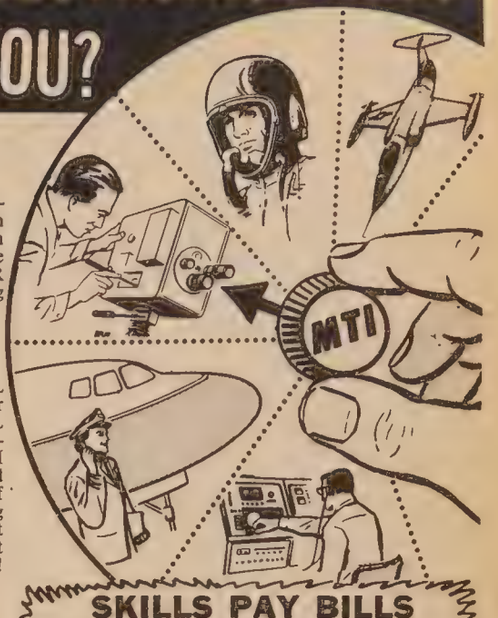

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The only monument ever erected to an engineer by his passengers, so far as we know, is at Brockville, Ontario. It honors Frank W. Blaine, "Canadian Casey Jones," whose Grand Trunk express hit a freight on a crossover Sept. 21, 1906. Other railmen leaped to safety. Blaine stuck to his post to slow the train and save his passengers, and he died. Standing by his grave is E. J. Moran, local chairman of B. of L.E.
The Locomotive Engineer (weekly)

Readsboro, Vt., is being operated, even today. We recommend this book.

BULLETIN No. 109, Oct. '63, edited by Charles E. Fisher, 68 pages, 6¼x9", illustrated, The Railway & Locomotive Historical Society, Inc., Baker Library, Harvard Business School, Boston, Mass. for members $2, non-members $3.

The latest in a long parade of authoritative and widely-quoted paperback books, No. 109, features "Stone Mountain Scenic Railroad," by Col. James G. Bogle; a detailed account of Ross Winans' huge *Centipede,* the first American-built 4-8-0, by John H. White, Jr.; the histories of several oldtime eastern Pennsylvania shortlines; some interesting data on Norris locomotives; and Mr. Fisher's story of the Rome, Watertown & Ogdensburg and its motive power, with an alltime roster. All 109 of these *Bulletins* have value for railhistory students. Among those on the committee in charge of the Society's publications is Frank P. Donovan, No. 19 in our *Interesting Railfans* series.

THE ROCK ISLAND IN IOWA, by Frank P. Donovan, 64 pages, 4½x8", paperback illustrated in black and white plus two pages of full color, *The Palimpsest*, State Historical Society, Iowa City, Iowa, 50c.

With railbook prices going up and up (a new one currently sells for $20!) it is refreshing to note that we can still buy a competent and well illustrated little history like *The Rock Island in Iowa* for half a buck. The CRI&P, Donovan points out, was not only Iowa's first rail line but even today operates more trackage in that state than any other company. And the state's first locomotive, the *Antoine Le Claire,* ferried across the Mississippi in 1855, was unique in having bronze figurines of its corpulent namesake on two sides of its sand dome. Readers who like their corporate histories spiked with anecdotes will doubtless agree that *The Rock Island in Iowa* is a good buy.

RAILWAY SIGNALLING SYSTEMS, new revised edition, by John R. Day and B. K. Cooper, 144 pages, 4¾x7", illustrated with photos and line drawings, Frederick Muller Ltd., distributed by Sportshelf, P.O. Box 634, New Rochelle, N.Y., $3.25.

This detailed British history goes back to the days of "policemen" with flags, baskets on poles, even lights in windows, and comes up to CTC.

FESTINIOG RAILWAY REVIVAL, by P. B. Whitehouse, 84 pages, 6x8¾", illustrated, full-color frontispiece, 17x12½" map, Ian Allan Ltd., distributed by Sportshelf, $5.25.

The 2-foot-gage Festiniog dates back to a Welsh tramway that began hauling slate in 1836 by gravity and horses and in 1863 was converted to steam. Slate business slumped so badly in 1946 that the railway was abandoned, but nine years later railfans revived it as a tourist line and have been running it ever since. This story Whitehouse tells in detail.

Our Cut-Rate Book Service

We always review new railbooks. As an added service to readers, we sell books at about 5 percent off publisher's price. Your choice is not limited to those reviewed. Our discount applies to almost any English-language railbook still in print, but only if it retails above $2. If you order any book not listed below, specify title, author's name, publisher, and his price.

Money orders and checks must be made out to *Railroad Magazine Book Service* (not to book publisher) and sent to 205 East 42nd Street, New York 17, N.Y. Here are a few suggestions:

	List Price	Our Price
THE OVERLAND LIMITED, by Lucius Beebe	$ 5.95	($ 5.60)
TROLLEY THRU COUNTRYSIDE, Chandler	$12.50	($11.90)
RAILROADS AND THE ROCKIES, by Ormes	$ 6.50	($ 6.20)
RAILWAYS OF SOUTHERN AFRICA, by Day	$ 5.75	($ 5.50)
RAILWAY SIGNALLING SYSTEMS, Day-Cooper	$ 3.25	($ 3.00)
FESTINIOG RAILWAY REVIVAL, by Whitehouse	$ 5.25	($ 5.00)
TWILIGHT OF STEAM LOCOMOTIVES, by Ziel	$ 5.95	($ 5.60)
THE MA & PA, by Geo. W. Hilton	$ 5.00	($ 4.75)
THE DAY THEY SHOOK THE PLUM TREE, by Arthur H. Lewis	$ 5.75	($ 5.50)
CENTRAL PACIFIC & SOUTHERN PACIFIC RAILROADS, by Lucius Beebe	$15.00	($14.25)
20TH CENTURY, by Lucius Beebe	$ 5.95	($ 5.65)
HIGHBALL: PAGEANT OF TRAINS, by Lucius Beebe	$ 2.98	($ 2.75)
QUEST FOR CRISIS, by J. N. Stites	$ 5.95	($ 5.60)
CANADIAN NATIONAL RAILWAYS, by G. R. Stevens, 2-vol. set	$12.50	($11.90)
GREAT TRAINS OF ALL TIME, by Freeman Hubbard	$ 4.95	($ 4.70)
FAMOUS LOCOMOTIVES OF WORLD, by Hamilton	$ 3.25	($ 3.00)
TRANSPORTATION, by Dudley F. Pegrum	$11.35	($10.80)
GRAND EUR. EXPRESSES, by Geo. Behrend	$ 9.25	($ 8.80)
FAMOUS TRAINS OF WORLD, by E. E. Carter	$ 3.25	($ 3.00)
UNUSUAL LOCOMOTIVES, by E. F. Carter	$ 5.75	($ 5.50)
FAMOUS UNDERGROUND RAILWAYS OF THE WORLD, by A. J. F. Wrottesley	$ 3.25	($ 3.10)
UNUSUAL RAILWAYS, by Wilson and Day	$ 5.75	($ 5.50)
MORE UNUSUAL RYS., by John R. Day	$ 5.75	($ 5.50)
WORLD RAILWAYS: 1962-'63 edited by H. Sampson	$20.00	($19.00)
THE GREAT LAKES CAR FERRIES, by Geo. Hilton	$ 6.00	($ 5.70)
HARRY BEDWELL, by Frank P. Donovan, Jr.	$ 3.75	($ 3.55)
THE TRAIN THAT NEVER CAME BACK (true railroad stories for 8-12 age) by Freeman Hubbard	$ 2.50	($ 2.25)
GREAT DAYS OF THE CIRCUS, by Freeman Hubbard	$ 3.25	($ 3.75)

Elkhart Lake, Wis., furthest point reached by any continuous trolley line from N. Y. State: the Sheboygan Ry., Light & Power car 101 unloaded freight there.
Stephen D. Maguire, 1411 River Road, Belmar, N.J.

SWITCH LIST

THESE items are published free and in good faith but without guarantee. Keep within 28 words, including your name and address. Use abbreviations such as *tts.* (timetables); *emp. tts* (employees timetables); *tr.*, train; and *SSE* (send 5¢ stamped envelope for list or details).

Write each item plainly or pen-print or typewrite it on a postcard or separate slip of paper—not buried in a letter about other matters. If you want pen pals, state your special interests so they will know what to write about.

A tight printing schedule compels us to close the *Switch List* a long time before publication date. As this magazine hits the newsstands, our next department is already closed. Entries for Aug. issue (out June 2) should reach us not later than March 20. Address Sy Reich, *Railroad Magazine*, 205 East 42nd Street, New York 17, N.Y.

ELLIS ACKER, 615 Gadsden Pl., Anniston, Ala., wants steam pen pals, any country, either sex.

C.T. ANDREWS, 4231 S.W. 38th St., West Hollywood, Fla., 33023, sells 4x5 and p.c. size pix LV, RDG, CNJ, L&NE, DL&W, Penna. shortlines.

FRED ARONE, 377 Ashford, Dobbs Ferry, N.Y., sells tts., emp. tts., switch keys, rulebks., bks., other railroadiana.

DON AUSTIN, N. Main St., Troy, N.H., sells transfers.

MIKE BOYAR, Box 2066, New York, N.Y., 10001, trades rr. pix, negs., slides for used envs. with stamps, postmarks, RPO cancelations. Wants pen pals.

BOB BRIODY, 66 St. Paul's Pl., Brooklyn, N.Y., 11226, wants any size pix rr. stations, diesels.

GERALD BROOKINS, 7100 Columbia Rd., Olmsted Falls, O., sells 5 color postcards of his Columbia Park & SW trolley line, 30¢ postpaid.

HENRY BRUECKMAN, Box 713, Lodi, Calif., will sell 1000 postcards with file cabinet, rr. scrapbook, color slides of frt., pass. cars. (SSE)

RICK BURN, 335 Elm Drive B, Madison, Wis., 53706, trades MILW slides.

JIM BUSINGER, 4251 Colorado Ave., Lorain, O., sells kerosene brakeman's lanterns, ½" scale, 1½" diam. steam wheels. (SSE)

WARREN CALLOWAY, Rte. 1, Box 144, Cary, N.C., buys any size negs. SAL Baldwin Centipedes, SAL FT's and 2700's.

CASEY CARNAHAN, East Rochester, O., wants steam whistles. Trades model passes.

PAUL CHODOURNE, 901 14th Ave. S., Clinton, Iowa, 52732, wants 8x10 pix C&NW 4-4-2 1305, color pix of Glen Ellyn station.

JIM CLAPPER, 924 Spangler Rd., Canton, O., will sell Railroad Magazine '43-'45.

HAROLD COX, 80 Virginia Ter., Forty Fort, Pa., wants data on Birney cars, rosters, etc., for book he is writing.

WM. COX, 1146½ S. Clark Dr., Los Angeles, Calif., 90035, will sell 35-yr. collection of railroadiana as a whole or trade for something valued at $11,000.

ROSS CRAIRR, 626 S. Hoefner Ave., Los Angeles, Calif., collects pix, guides, tts., negs., roster, etc. List.

STAN CREWS, Box 748, Elberton, Ga., 30635, sells rr. trolley pix, varying sizes, cond., rrs.

L. P. CUMMINGS, Jr., 129 Nevin St., Lancaster, Pa., 17603, wants alltime BTC roster. (SSE)

BRIAN CURNOW, 320 Lyons St., Sonora, Calif., buys p.c. size action pix and negs. of West Side Lumber Co. trains.

RALPH DERBY, Box 162, Raynham, Mass., sells genuine 100-yr.-old, heavy U-rail slices 3" high, 1" thick, dug up from Maine Central rt.-of-way, useful as paperweight or desk ornament, historical data included, $3 each, postpaid.

RAY DESCHENES, 30 Mohawk Rd. W., Hamilton, Ont., Canada, sells 3½x5 to 8x10 steam pix CN, CP; buys steam negs. CN, CP; list 10¢.

STEVE DOBROW, Box 3106, Long Island City, N.Y., edits "Better Transit Bulletin," bi-monthly journal, transit news of N.Y. Metro, area. Sample copy SSE.

GLENN FESSLER, Marty, S.D., 57361, wants pen pal to swap diesel and elec. pix.

MIKE FINE, 6 Beechwood Terr., Poughkeepsie, N.Y., 12601, sells pix, plans New Haven flanger.

DON FISHER, c/o Myers, 1511 N. 2nd St., Harrisburg, Pa., sells 3½x5 pix PRR. List, sample 10¢ and SSE.

BOB FITZGERALD, 603 Woodland Dr., Havertown, Pa., wants condr.'s trainman's lapel badges, punches, etc., esp. from East.

KENTON FORREST, 490 Kendall, Lakewood, Colo., 80226, buys anything on Denver Tramways, Denver & Intermtn., other Colo. lines.

RALPH FRANTZ, 1138 W. Union Blvd., Bethlehem, Pa., will sell for best offer one 1909 Off. Guide, perf. cond.

L. FREMMING, 1650 N. Pacific, Kelso, Wash., sells rr.-picture postcards.

TED GAY, 6 Northview Dr., Morris Plains, N.J., sells p.c. size negs. rail motor cars, gas elecs.; wants '15-'19, '30 Off. Guides, orig. 8mm movies.

BOB GREENAWALT, 3643 N. Rosemead Blvd., Rosemead, Calif., buys, trades rr. stock and bond certificates.

JOHN GROW, 1330 Sesom Dr., Decatur, Ill., sells steam loco pix Colo. area, emp. tts., 1901 train register. (SSE)

WADE HALL, 715 N. 70th St., Seattle, Wash., will sell all copies of Railroad Magazine 8/56 to date, excel. cond., also Western rr. lanterns. (SSE)

WALT HARRIS, 1668 Brandon Ave. S.W., Roanoke, Va., sells back issues Railroad Magazine, Trains, emp. tts., U.S., British model mags., bks. List 10¢.

H.W. HAWLEY, 59 E. Van Buren St., Chicago, Ill., will buy pre-'90 Colo. Mid. passes or trade '91, '93 CM or ATSF passes.

L.J. HENDRICKS, 125 S. 34th St., Boulder, Colo., 80302 wants any size negs. or 8x10 prints of any StL&N locos.

KARL HENKELS, 1628 N. Oakley, Chicago, Ill., sells, trades 35mm Kodachrome orig. slides diesels, cabooses, interesting cars. Buys collections of slides.

I.E. HINZE, 1920 Fayette Ave., Beloit, Wis., wants railroadiana on WC, DSS&A, LS&I, DM&IR.

AL HUDSON, 128 Hann Dr., Birmingham, Ala., buys Birmingham trolley destination signs, etc.

DICK HUTCHINGS, 20435 Steel Ave., Detroit, Mich., 48235, sells 3½x5, 5x7, 8x10 GTW steam, diesel pix.

BOB INGHRAM, Box 194, Chesapeake, O., asks what became of Sewell Valley motive power; wants brief SV history.

BILL JERNSTROM, 822 Pelham Dr., Ft. Wayne, Ind., sells 616 and larger steam, elec. loco pix, U.S., Canada, Mexico. Sells steam negs., size 120, many rrs., short lines, loggers.

TIM KOUPAL, Mineola, Missouri, 63360, wants BAR pix, info., railroadiana, esp. Pacific loco 251 data and pix.

JOHN LAWRENCE, 355 St. Patrick Lane, Florissant, Missouri, sells b&w loco pix. Trades for CB&Q items. (SSE)

OWEN LEANDER, 127 Wildwood Rd., Elk Grove Village, Ill., sells orig. 35mm. Kodachrome slides and 120 negs. rrs. in Chicago area, incl. elecs.

ED LEWIS, 3 Glen Keith, Glen Cove, N.Y., wants pix M&U, M&NJ suitable for publication. Sells info. on shortlines.

BILL LINLEY, 30 Altair Ave., Ottawa 7, Ont., Canada, trades 35mm slides, negs. 2¼x3¼ and up, Canadian diesels. Sells 3½x5½ pix steam, diesel, elec., on approval.

FLVIN LIQUE, 917 N. 3 Ave., Wausau, Wis., 54401, sells back issues Railroad Magazine. Buys 35mm color slides CB&Q, C&NW, MILW GP30's, Century 424's, 628 units.

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JOHN QUINN, 49 Foxhurst Lane, Manhasset, L.I., N.Y., wants info. on NYC elec. locos and electrified zone.

W.B. RANDOLPH, 1605 Skyline Dr., North Little Rock, Ark.. 72116, wants info. on EMD oddball BL-2, how many in service, where, any rebuilt?

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DAVE SACKS, 1040 N. Orange St., Orange, Calif., will sell '28 Off. Guide with cover and first few pages missing.

JIM ST. ONGE, 2721 Parkridge, Marinette, Wis., will trade "Iron Road to Empire" for "Fiddle Hill"; "Clear Iron" (8mm 150') for "Georgetown Loop."

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CN Roster Revisions

Our Canadian National roster (Dec. '63) has enjoyed a good reception, judging from readers' letters, but several errors have been brought to our attention. Regarding steam power, Ray Corley writes that 2534 (not 2524) is being kept while 6153 (not 6158) is held for the CRHA, and 6060 (not 6100) is now at Jasper.

Diesel corrections are itemized here. CN 500 is ex Thousand Islands Ry. 500. It was built from an Oshawa Ry. electric loco but not operated by Oshawa. Add to note 55 the comment that these units were to have been numbered 2025-2044 but the numbering was changed before they were completed. Add to note 80 the comment that the unused class GRG-12q was intended to contain loco numbers 1910-1926.

To class GR-12f should be added note 84 stating that 1227 and 1228 were originally numbered 2300 and 2301. Units 1229-1247 were to have been numbered 2302-2320 but renumbering took place before they were completed. Next to units 7225, 7226, and 8205 should be note 86, reading, Lettered Grand Trunk. Next to unit 6 should be notes 83 and 77.

Added to the roster should be CN class V-1a numbers 9000 and 9001, each of which was 1330 hp., built by CLC-BW, with 2-D-1 wheel arrangement, 50,000 lbs. tractive effort, and 334,000 lbs. weight, built in 1928-'9. Note 81 applies.

Also add CN class Q-3a number 7750, with 325 hp., built in 1932 by CN, CGE, and Canadian Ingersoll Rand, with B-B wheel arrangement, 63,600 lbs., tractive effort, and 237,000 lbs. weight. Note 82 applies. Also add CN class Q-7a numbers 7803-7820, to be used on Prince Edward Island, built in 1948-'9 by CLC-Whitcomb, model 75-DE-12. Note 85 applies.

Add to note 11 that 78 was scrapped in 1962. The last sentence in note 26 should be revised to read that 43 was sold in 1962 to Acadia Coal Co., not renumbered. Add to note 28 that 8454 was sold 4/63 to Manitoba Paper Co., Manitoba Falls, Man. Note 31 should read 775-777 originally were Newfoundland Ry 5000-5002, renumbered in 1950.

To note 32 should be added 851 sold to International Nickel Co., Thompson, Man., in 6/63. Note 81 should read, Retired 1946. Note 82 should read, Retired 1949; was to have been rebuilt to 7802. Note 83 should read, Purchased from GE; ex Minneapolis & St. Louis. Note 85 should read, Returned to builder as unsuitable for service.

7818 was sold to Washington & Old Dominion, renumbered 55. The rest were sold to the Chicago, Rock Island & Pacific, renumbered 1000-1016. CRI&P 1006 was sold to the Great Southwestern RR. CRI&P 1016 was sold to the Des Moines & Central Iowa, renumbered 1000. ●

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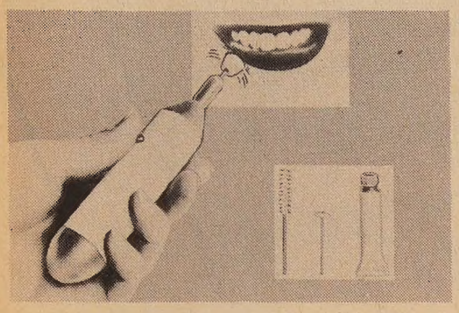

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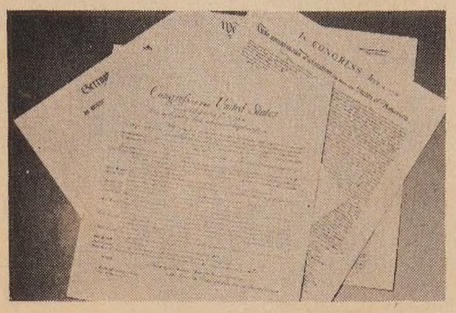

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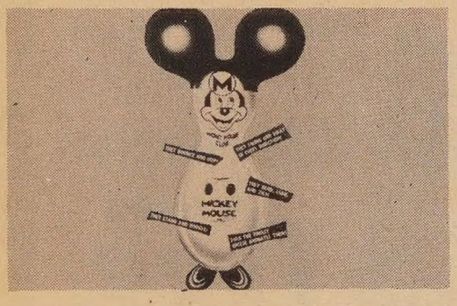

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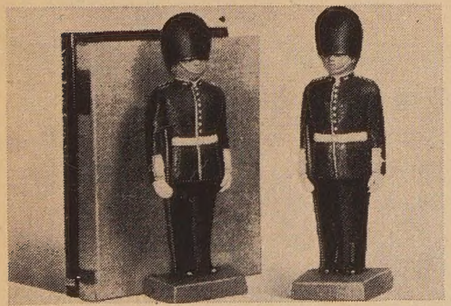

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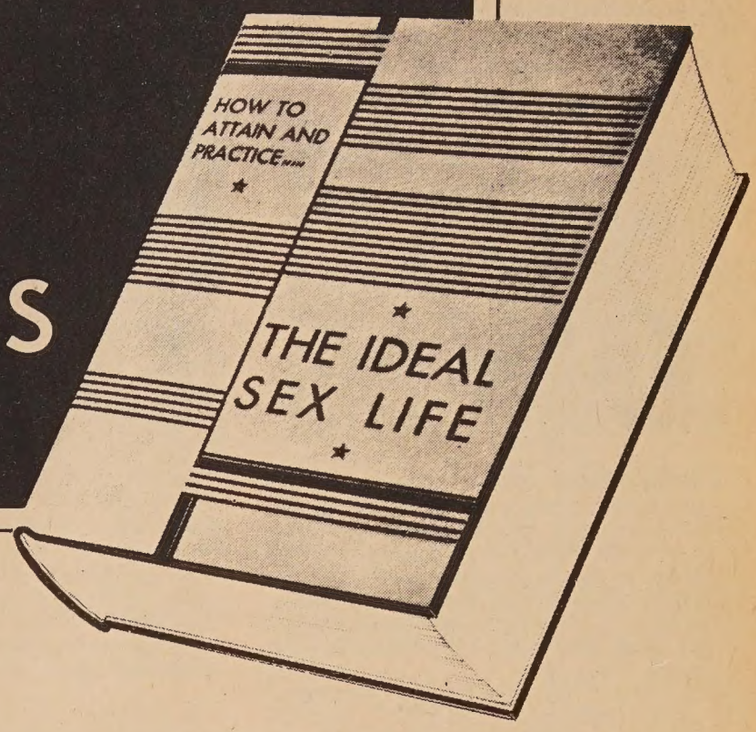

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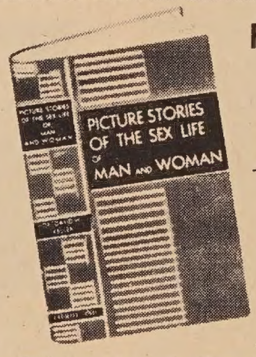

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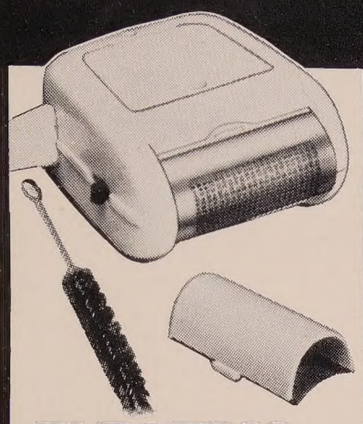

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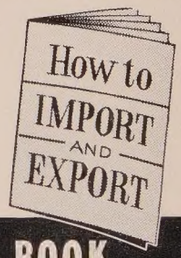

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